

# Search Report

# STIC Database Tracking Number: 234114

To: QUOC TRAN

Location: RND-3A60

Art Unit: 2176

Tuesday, August 14, 2007

Case Serial Number: 10/811234

From: CAROL WONG Location: EIC2100

RND-4B28 / RND-4A30 Phone: (571)272-3513

carol.wong@uspto.gov

## **Search Notes**

#### **Examiner TRAN:**

Attached are the search results for your case.

Color tags mark the patents/articles which appear to be most relevant to the case. Color of tag has no significance. Pls review all documents, since untagged items might also be of interest.

Pls call if you have any questions or suggestions for additional terminology, or a different approach to searching the case.

Thx, Carol





# STIC EIC 2100 Search Request Form

	at date would you like to use to limit the search?
8-14-07 Prior	rity Date: 03 26/04 Other:
Name Quic A. TRA XI	Format for Search Results (Circle One):
AU <u>2176</u> Examiner # <u>80 /3 5</u>	PAPER DISK EMAIL
Room # RND 3 4 60 Phone X 86 6 Cf	Where have you searched so far?  USP DWPI (EPO JPO ACM (BM TDB)
Serial # 10/8/1, 234	IEEE INSPEC SPI Other
Is this a "Fast & Focused" Search Request? (Circle One) YES NO  A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria-are posted in EIC2100 and on the EIC2100 NPL Web Page at http://ptoweb/patents/stic/stic-tc2100.htm.	
What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.	
THE POADD SADDEALO SE O COLLEGE	
Is this request for a BOARD of APPEALS case? (Circle One) YES NO	
Is this case a SPECIAL CASE? (Circle One) YES	
Claims excel sprendsteet includes.	
Cormolaically bounding an application	
cell to mage volues) u/ type azzuma	
parel A	
rong by redividue	
min/max two thurshold	
bunn	
STIC Socrebor 20 00-1	Phone 2-3513
STIC Searcher <u>C. Word</u>	
Date picked up 8-14 Date Completed 8-1907	

Erail holds



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File 696:DIALOG Telecom. Newsletters 1995-2007/Aug 14
           (c) 2007 Dialog
File
       15:ABI/Inform(R) 1971-2007/Aug 13
           (c) 2007 ProQuest Info&Learning
       98:General Sci Abs 1984-2007/Jul
(c) 2007 The HW Wilson Co.
File
File 141:Readers Guide 1983-2007/Jun
(c) 2007 The HW Wilson Co
File 484:Periodical Abs Plustext 1986-2007/Jul w5
           (c) 2007 ProQuest
File 553:Wilson Bus. Abs. 1982-2007/Aug
           (c) 2007 The HW Wilson Co
File 813:PR Newswire 1987-1999/Apr 30
           (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2007/Aug 14
(c) 2007 PR Newswire Association Inc File 635:Business Dateline(R) 1985-2007/Aug 11
(c) 2007 ProQuest Info&Learning File 810:Business Wire 1986-1999/Feb 28
           (c) 1999 Business Wire
File 610: Business Wire 1999-2007/Aug 14
           (c) 2007 Business Wire.
File 369:New Scientist 1994-2007/Jul W5
(c) 2007 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul w3
           (c) 1999 AAAS
File 624:McGraw-Hill Publications 1985-2007/Aug 14 (c) 2007 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2007/Aug 11
           (c) 2007 San Jose Mercury News
File 647:CMP Computer Fulltext 1988-2007/Sep w2
           (c) 2007 CMP Media, LLC
File 674: Computer News Fulltext 1989-2006/Sep W1
           (c) 2006 IDG Communications
Set
          Items
                   Description
S1
        687766
                    CELL OR CELLS
S2
           2641
                    S1(5N)BOUND?
                   BOUND? OR LIMIT??? OR LIMITATION? ? OR RESTRICT? OR CONFIN-
S3
       6470618
                ??? OR CONFINEMENT? OR PROSCRIB? OR PRESCRIB? OR ALLOW? OR DE-
                FIN??? OR DEFINITION? OR FINITE OR CIRCUMSCRI?
        439498
54
                    S3(5N)(VALUE OR VALUES OR DATA OR NUMBER? ? OR NUMERIC??)
          27517
                    S3(5N) VARIABLE? ?
S5
                   $3(5N)(NUMERAL? ? OR DIGIT? ? OR INTEGER? ? OR DATUM? ?)
RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT?
           3136
S6
                RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT?

(START??? OR BEGIN???? OR COMMENC??? OR COMMENCEMENT?)(30N-)(TERMINAT??? OR END? ? OR ENDED OR ENDING? ? OR CONCLUD? OR -
       2659527
S7
S8
        576820
                CONCLUS?)
S9
        232723
                    (MAXIMUM? OR UPPER OR BOUNDMAX? OR MAXBOUND? OR HIGHEST OR
                GREATEST) (30N) (MINIMUM? OR LOWER OR BOUNDMIN OR MINBOUND? OR -
                LOWEST OR SMALLEST OR LEAST OR BOTTOM)
                   MAXMIN OR MINMAX OR MIN(1W)MAX
S10
           1867
S11
          82262
                    SPREADSHEET? OR SPREAD()SHEET? ?
S12
          14816
                   WORKSHEET? OR WORK()SHEET? ?
S13
           4308
                   S1(30N)S4:S6
S14
            474
                    (S2 OR S13)(50N)S7:S10
                    S14(100N)S11:S12
S15
             50
          20911
s16
                    (S2 OR S4:S6)(30N)S7:S10
S17
            496
                    $16(50N)S1
S18
             44
                    S17(100N)S11:S12
$19
$20
                   S15 OR S18
S19/2005:2007
             55
                   S19 NOT S20
S21
             50
S22 46 RD (unique items)
? t22/3,k/8-9,11,15,21-22,29-31,38,40,46
```

22/3,K/8 (Item 8 from file: 15) DIALOG(R) File 15: ABI/Inform(R)

(c) 2007 ProQuest Info&Learning. All rts. reserv.

01658419 03-09409 Capital-budgeting decisions using "crystal ball" Atkinson, Stanley; Kelliher, Charles; LeBruto, Stephen Cornell Hotel & Restaurant Administration Quarterly v38n5 PP: 20-27 Oct

ISSN: 0010-8804 JRNL CODE: CHR

WORD COUNT: 3484

...TEXT: as explained below.8

Once the deterministic model is complete, Crystal Ball or @RISK (another spreadsheet insert) is used to replace the single-point estimate in each cell with the appropriate...

...data that may be skewed, or with data that can only be estimated by a range of possible values.

Help for the user. The probability distribution defines the range of values that the cell may take on during the simulation, while the shape of the distribution determines the number...

(Item 9 from file: 15) 22/3, K/9DIALOG(R) File 15: ABI/Inform(R) (c) 2007 ProQuest Info&Learning. All rts. reserv.

01540413 01-91401 Spreadsheet helps optimize four-bar linkages Mule, Michael S Machine Design v69n22 PP: 106-108 Nov 20, 1997 ISSN: 0024-9114 JRNL CODE: MDS WORD COUNT: 568

...TEXT: angles a and : (Formula Omitted)

where a, b, c, and d are link lengths.

The spreadsheet method requires users provide three angular positions of the crank and three corresponding positions of the follower. A spreadsheet then solves three simultaneous equations for k sub 1 k sub 2, and k sub

...fixed frame length, determines the scale of the mechanism.

When solving a problem using a spreadsheet optimizer such as Quattro Pro. first specify the variable cells to be adjusted, then specify constraint cells that must fall within certain limits or satisfy target values. Users can also specify a solution cell to minimize, máximiže, or set to a certain value.

For the four-bar generator, the table Spreadsheet labels shows how the cells are set up. Formulas appear in Spreadsheet equations. The given parameters or inputs are the crank starting and ending angles, the corresponding follower angles, the fixed frame length, and most importantly, the intermediate angles...

...A9.

(Chart Omitted)

Captioned as: Planning a planar four-bar linkage

(Table Omitted)

Captioned as: Spreadsheet equations

Inputs and outputs for a four-bar calculator

To set up the optimizer, cells...

 $22/3, \kappa/11$ (Item 11 from file: 15) DIALOG(R) File 15: ABI/Inform(R) (c) 2007 ProQuest Info&Learning. All rts. reserv.

01210288 98-59683 How to make spreadsheets error-proof Freeman, David

Journal of Accountancy v181n5 PP: 75-77 May 1996

ISSN: 0021-8448 JRNL CODE: JAC

WORD COUNT: 1817

...TEXT: Illustration Omitted)

(Illustration Omitted)

(Illustration Omitted)

Limit controls. These prevent entry of figures outside tolerable ranges

As shown in exhibit 4, above, depreciation must be between 0% and 75%. Cells B2...

...contains the formula =IF(OR(B5<B2,B5>C2), "outside limit",B5). In English, this cell says that if the depreciation rate is less than 0% or greater than 75%, display "outside limit," otherwise give the value in

Reasonableness. Are numeric data being entered where text is expected or vice versa?

In exhibit 5, at right, data have been transposed in cells B2 and B3. Cell D2 contains the formula =IF(ISTEXT(B2),B2,"name must be text"). This formula says...

...these and other types of controls varies depending on a user's specific requirements. The spreadsheet should not be able to produce output unless all the controls indicate there are no...

 $22/3, \kappa/15$ (Item 15 from file: 15) DIALOG(R)File 15:ABI/Inform(R) (c) 2007 ProQuest Info&Learning. All rts. reserv.

00791085 94-40477 An overview of one fuzzy logic software package Anonymous Management Accounting v75n4 PP: 41 Oct 1993 JRNL CODE: NAA ISSN: 0025-1690 WORD COUNT: 382

ABSTRACT: FuzziCalc, by Fuziware, Inc., is a **spreadsheet** software package based on fuzzy logic. Each cell in the **spreadsheet** is uniquely identified by an alphabetic column heading and a numeric row heading. Using a mouse, the user can select whether each **cell** value will be

represented by a single number or a fuzzy belief distribution. When a user has chosen to represent a cell value with a fuzzy belief distribution, the system prompts the user to input the high and low values that define the range of possible outcomes.

TEXT: 1. FuziCalc is a spreadsheet software package based on fuzzy logic. Each cell in the spreadsheet is uniquely identified by an alphabetic column heading and a numeric row heading. All values on the spreadsheet can be manipulated mathematically.

- 2. Using a mouse, the user can select whether each cell value will be represented by a single number or a fuzzy belief distribution (similar to Figure 1). (Figure 1 omitted)
- 3. When a user has chosen to represent a **cell** value with a fuzzy belief distribution, the system prompts the user to input the high and low **values** that **define** the **range** of possible outcomes (similar to the (0,0) and (2,000,0) coordinates in Figure 1).
- 4. Once the **range** of possible outcomes has been established, the user can select one of four graphically displayed...

22/3,K/21 (Item 21 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(C) 2007 ProQuest Info&Learning. All rts. reserv.

00690528 93-39749
Excel tool offers graphical controls
Walkenbach, John
Infoworld v15n14 PP: 105 Apr 5, 1993
ISSN: 0199-6649 JRNL CODE: IFW
WORD COUNT: 441

...TEXT: in that lets you create and display graphical controls to quickly change the values in worksheet cells. The program offers vertical and horizontal sliders and a circular dial control. Quattro Pro...

...easier.

After you install the program, Excel displays the new Sliders menu option. Select a cell that you want to vary graphically, then choose the Sliders Create command. A dialog box lets you specify a few options, such as the control type, the minimum and maximum allowable values, the step increment, a name (up to 31 characters with no spaces), and the numeric format that displays in the control. Manipulating the control immediately changes the value in that cell. Each slider or dial appears in its own window, which is movable but not resizable...

22/3,K/22 (Item 22 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(C) 2007 ProQuest Info&Learning. All rts. reserv.

00682373 93-31594 1-2-3 for Windows to sport major interface change Barney, Doug; Hammett, Jim Infoworld v15n12 PP: 1, 8 Mar 22, 1993 ISSN: 0199-6649 JRNL CODE: IFW WORD COUNT: 394

...TEXT: a lot of functions that cover engineering, finance, and annuities."

Release 4 includes a tabbed worksheet model that allows users to toggle

through sheets by simply clicking the tab.

To ease...

...that shows the most recently selected object, such as a chart, database query, range, or cell. Users can choose named ranges to post into a formula or move through a worksheet via named ranges.

Also, Release 4 supports a variety of alignment options for both text and numeric entries. These options allow users to align data over a range of columns and rotate and wrap text within a cell.

In addition, 1-2-3 users can query multiple database tables simultaneously and do relational...

22/3.K/29(Item 1 from file: 484) DIALOG(R)File 484:Periodical Abs Plustext (c) 2007 ProQuest. All rts. reserv.

06247194 SUPPLIER NUMBER: 429516091 (USE FORMAT 7 OR 9 FOR FULLTEXT) Technology tips

Hollebrands, Karen Flanagan; Stohl, Hollylynne Mathematics Teacher (IMTT), v96 n7, p516-519

Oct 2003

ISSN: 0025-5769 JOURNAL CODE: IMTT

DOCUMENT TYPE: Feature

LANGUAGE: English WORD COUNT: 1545 RECORD TYPE: Fulltext; Abstract

#### TEXT:

existing toolbars at the top of the document or as a floating box within the spreadsheet .

To add a scroll bar to the spreadsheet, we click on the scroll-bar button ... and then click and drag it in the spreadsheet to create a long, narrow rectangle where we want to place the scroll bar. when...

...the scroll bars are in place, we must format each scroll bar to determine the maximum value, the minimum value, and the step increment for each. We must also define which cell 's value will be controlled by the scroll bar. To format a scroll bar, we either right...
...parameters a and b to take on integral values (-10, 10). However, Excel does not allow users to enter negative values as maximum or minimum values of the scroll bar. We therefore set the minimum value to 0 the values of the scroll bar. We therefore set the minimum value to 0, the maximum value to 20, and the incremental change to 1. We will later perform a computation...

...to (-10, 10). To indicate where we would like the value to appear in the spreadsheet, we type in the absolute reference for the cell (or simply click on the cell) in the Cell Link box. A cell link of \$B\$9 indicates that the current...

(Item 2 from file: 484) 22/3, K/30DIALOG(R)File 484:Periodical Abs Plustext (c) 2007 ProQuest. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULLTEXT) Software spotlight: TWODAN 5.0 Diodato, David M Ground Water (IGDW), v36 n3, p389-390, p.2 May 1998 ISSN: 0017-467X JOURNAL CODE: DOCUMENT TYPE: Product Review-Favorable

LANGUAGE: English RECORD TYPE: Fulltext; Abstract WORD COUNT: 1929

TEXT:

digitize locations. The user is reliably prompted to fill in required input, and the necessary cells are highlighted. Input data descriptions of model elements, aquifer geometry, and hydrogeologic properties are entered in spreadsheet -like cells. When the cursor passes over the data cell, the user is supplied with contextsensitive information about the appropriate data and any restrictions to the range of values that might be relevant for the data type. For example, the user is informed that...

(Item 3 from file: 484)  $22/3, \kappa/31$ DIALOG(R) File 484: Periodical Abs Plustext (c) 2007 ProQuest. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULLTEXT) The pointer function--An invaluable calculational tool Freiser, Henry Journal of Chemical Education (ICHE), v71 n4, p297-299 Apr 1994

ISSN: 0021-9584 JOURNAL CODE: ICHE

DOCUMENT TYPE: Feature LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 2323 LENGTH: Long (31+ col inches)

TEXT:

like those for Bronsted acid-base systems.)

As with the acid-base system, when the spreadsheet layout appears on the screen, use the first row to suitably label all the columns...

containing species, log [Cu(NH sub 3 ) sub i sup 2+ ].

Next, enter starting in cell A2 a range of values of log [NH sub 3 ] from -6 to 0, at suitable intervals, for example, increments of 0.1. This range is bounded by a value low enough (at least one unit lower than -log K sub f1 ) so that [Cu...

...f4 ) that the fully formed complex is the major species. This is accomplished by the spreadsheet command:/EF{BF;/DF}. Now, for cell B2, write the formula defining [NH sub 3...

22/3,K/38 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext (c) 2007 CMP Media, LLC. All rts. reserv.

01108865 CMP ACCESSION NUMBER: WIN19961101S0125 Plug into the Office of the Future - Our peek at a prerelease copy of Office 97 revealed some "i"-catching innovations that key in on prerelease copy of integration, the Internet and intranets.
Joel T. Patz and James E. Powell

WINDOWS MAGAZINE, 1996, n 711, PG194 PUBLICATION DATE: 961101

JOURNAL CODE: WIN LANGUAGE: English

RECORD TYPE: Fulltext SECTION HEADING: Feature WORD COUNT: 4359

colors to help you understand chart ranges. For instance , when viewing a chart within a spreadsheet, you can click on a bar in a chart and watch Excel display a different...

...what numbers are plotted where. Again, you can drag the frame to the correct cell **range** and your chart will be automatically updated. Color is also used for conditional formats; these display a **cell** in a

different color based on rules you set, such as red to indicate a value

greater than a maximum limit

The new AutoCorrect fixes formulas, too. It can add the closing parenthesis to SUM(B1:B4., eliminate double operators (A1++A2), fix incorrect cell addresses (changing 1A to A1) and correct implied multiplication (converting 3(A1) to 3\*A1...the cursor to change the dimension.

Collaboration features get good marks. You can view any worksheet with your own personal settings, such as print, filter and view settings. You can add...

...someone else's comments, merge workbooks at regular intervals, and track, accept or reject changes. **Cell** tips on each highlighted **cell** explain what changed, who made the change and the time the change was made.

Excel's new data validation lets you define simple input rules without writing code (you can specify range values or list permissible values by choosing options from a dialog box). You can even ask Excel to find and circle all invalid cells in red.

Excel's developers focused closely on improving the appearance of published charts. You...

22/3,K/40 (Item 3 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2007 CMP Media, LLC. All rts. reserv.

01035619 CMP ACCESSION NUMBER: eet19941121S0049 Patent Office clear on fuzzy spreadsheet (Tech files) R. COLIN JOHNSON ELECTRONIC ENGINEERING TIMES, 1994, n 824, PG38

ELECTRONIC ENGINEERING TIMES, 1994, N 824, PG38

PUBLICATION DATE: 941121

JOURNAL CODE: eet LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: technology

WORD COUNT: 333

a ``fuzzy spreadsheet data-processing system,'' FuziCalc can perform the same operations as a conventional **spreadsheet**. The difference covered by the patent is that its cells can be transformed into fuzzy values. `Our patent is quite broad, covering any use of fuzzy numbers in a **spreadsheet**,'' said FuziWare president Karl Thorndike.

Neural, genetic and other cognizer technology add-ons already exist for spreadsheets, but Thorndike claims that using fuzzy numerical processing cannot be added on. `Fuzzy numbers must be built into a spreadsheet from the beginning, and now we have the patent on that process,'' he said.

Conventional **spreadsheet** cells hold crisp numerical values, text or formulas.

In addition, FuziCalc cells can hold fuzzy values that formulas can operate upon in the same manner as crisp...

...about' 500 units per day, with 350 and 750 units a day defined as the lower and upper limits of this fuzzy number. Any references to this value in cells or their formulas will, of course, produce fuzzy results, which then can be fed into...

22/3,K/46 (Item 3 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2006 IDG Communications. All rts. reserv.

002954

Planperfect: A few advantages

Journal: Computerworld Page Number: 45

Publication Date: December 11, 1989 Word Count: 961 Line Count: 69

#### Text:

. . , .

Wordperfect Corp.'s Planperfect is a full-featured **spreadsheet** featuring simple **spreadsheet** linking capability, database features and presentation graphics. Version 5 includes two new command interfaces: a...

...functions, plus several additional functions. It also duplicates 1-2-3's regression, matrix and data table tools and offers user- defined functions.

Planperfect's For Each function is particularly useful. It returns a list of values from a range that meet a specified condition. It is used in conjunction with other functions such as...

...a plus sign will sum the preceding vertical range of numbers, creating a subtotal. A **cell** with two plus signs will add the first level of subtotals, three plus signs will...

```
File
       9:Business & Industry(R) Jul/1994-2007/Aug 07
         (c) 2007 The Gale Group
      13:BAMP 2007/Jul W5
File
         (c) 2007 The Gale Group
File
      16:Gale Group PROMT(R) 1990-2007/Aug 13
         (c) 2007 The Gale Group
File
      47:Gale Group Magazine DB(TM) 1959-2007/Jul 31
         (c) 2007 The Gale group
File
      88:Gale Group Business A.R.T.S. 1976-2007/Aug 06
         (c) 2007 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2007/Aug 08
         (c)2007 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2007/Jul 24
         (c) 2007 The Gale Group
File 621:Gale Group New Prod.Annou (R) 1985-2007/Aug 08
         (c) 2007 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2007/Aug 10
         (c) 2007 The Gale Group
Set
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S1
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             ??? OR CONFINEMENT? OR PROSCRIB? OR PRESCRIB? OR ALLOW? OR DE-
             FIN??? OR DEFINITION? OR FINITE OR CIRCUMSCRI?
                S3(5N)(VALUE OR VALUES OR DATA OR NUMBER? ? OR NUMERIC??)
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S5
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S7
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                RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT?
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S8
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             CONCLUS?)
S9
       421872
                 (MAXIMUM? OR UPPER OR BOUNDMAX? OR MAXBOUND? OR HIGHEST OR
             GREATEST) (30N) (MINIMUM? OR LOWER OR BOUNDMIN OR MINBOUND? OR -
             LOWEST OR SMALLEST OR LEAST OR BOTTOM)
         5729
S10
                MAXMIN OR MINMAX OR MIN(1W)MAX
S11
       219731
                SPREADSHEET? OR SPREAD()SHEET? ?
        37464
S12
                WORKSHEET? OR WORK()SHEET? ?
         8193
S13
                S1(20N)S4:S6
S14
        33646
                S4:S6(20N)S7:S10
S15
        12011
                S11:S12(20N)S1
                $13($)$14
$16($)$15
$17/2004:2007
S16
          483
S17
          112
S18
                S17 NOT S18
S19
          105
S20
           57
                RD (unique items)
```

? t20/3,k/1-2,6,8-9,12,22,24,34,45,47,49,55-56

(Item 1 from file: 9)  $20/3, \kappa/1$ DIALOG(R)File 9:Business & Industry(R) (c) 2007 The Gale Group. All rts. reserv.

00589856 Supplier Number: 23079379 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Patent Office clear on fuzzy spreadsheet

(Fuziware files for application for protection of its FuziCalc fuzzy-logic-based spreadsheet; Patent Office allows application)

Electronic Engineering Times, n 824, p 38

November 21, 1994

DOCUMENT TYPE: Journal ISSN: 0192-1541 (United States) LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 328

(USE FORMAT 7 OR 9 FOR FULLTEXT)

...using fuzzy numerical processing cannot be added on. "Fuzzy numbers must be built into a spreadsheet from the beginning, and now we have the patent on that process," he said.

Conventional spreadsheet cells hold crisp numerical values, text or formulas.

In addition, FuziCalc cells can hold fuzzy values that formulas can operate upon in the same manner as crisp...

...about" 500 units per day, with 350 and 750 units a day defined as the lower and upper limits of this fuzzy number. Any references to this value in cells or their formulas will, of course, produce fuzzy results, which then can be fed into...

 $20/3, \kappa/2$ (Item 1 from file: 13) DIALOG(R) File 13: BAMP (c) 2007 The Gale Group. All rts. reserv.

00531578 Supplier Number: 23627950 (USE FORMAT 7 OR 9 FOR FULLTEXT) Simulation Modeling and DOE

(Design of Experiments is a systematic approach known as statistical

experimental design that helps in simulation modeling)

IIE Solutions, v 28, n 9, p 24-30

September 1996

DOCUMENT TYPE: Journal ISSN: 1085-1259 (United States) LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4008

(USE FORMAT 7 OR 9 FOR FULLTEXT)

#### TEXT:

...Operators. The corresponding equation was entered for %Idle referencing the same Barrels Available and Operators cells . Constraints, including the desired limits on the %Idle equation, and limits on the range of values for Barrels Available and Operators were entered. Executing the Solver tool yielded an optimized value for the target cell . A copy of the Excel spread sheet and the answer report generated by Solver is also shown in Figure 6. Figure 6

Target Cell (Max)

ce11 Name Original Value Final Value Barrels Prcssd. 495.В \$B\$3 156.76

Adjustable Cells...

20/3, K/6(Item 3 from file: 16) DIALOG(R) File 16: Gale Group PROMT(R) (c) 2007 The Gale Group. All rts. reserv.

Supplier Number: 44196761 (USE FORMAT 7 FOR FULLTEXT) FORECASTING AND RISK ANALYSIS wall Street & Technology, p52 Nov, 1993 Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 167

strategic planners, investors, entrepreneurs and other professionals whose jobs involve analyzing risk and forecasting financial values .

Crystal Ball works by **allowing** the user to apply either a **range** of values or a probability distribution to each **spreadsheet** cell containing an uncertain number. The software generates random values for each of the cells , recalculates it numerous times and graphically displays the distribution of results ranging from highest and...

20/3,K/8 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM) (c) 2007 The Gale group. All rts. reserv.

SUPPLIER NUMBER: 17800663 04412269 (USE FORMAT 7 OR 9 FOR FULL TEXT) Formula One 3.0. (Visual Components' spreadsheet software) (one of five articles on five OLE controls searchable under "Prepackaged Power II More New OCX Controls") (PC Tech) (Software Review) (Evaluation) Plain, Stephen W.

PC Magazine, v15, n3, p222(2)

Feb 6, 1996

DOCUMENT TYPE: Evaluation ISSN: 0888-8507

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

779 LINE COUNT: 00064 WORD COUNT:

... the workbook at runtime, but adds a formatting toolbar. You can use it to format cells, open Excel files, place charts, draw shapes, and perform many other formatting operations.

Of course, no spreadsheet is complete without all those hard-to-remember functions. Formula One comes with 130 functions, including financial, trigonometric, date/time, and string conversion calls. You can also define data validation rules for ranges of cells to enforce proper data entry. And you can bind Formula One workbooks to ODBC data...

(Item 2 from file: 47) DIALOG(R) File 47: Gale Group Magazine DB(TM) (c) 2007 The Gale group. All rts. reserv.

04159346 SUPPLIER NUMBER: 16295709 (USE FORMAT 7 OR 9 FOR FUL FuziCalc: for when the world isn't black and white. (Evaluation of (USE FORMAT 7 OR 9 FOR FULL TEXT) FuziWare's FuziCalc 1.5 Windows spreadsheet) (First Looks) (Software Review) (Brief Article) Rosenthal, Steve

PC Magazine, v13, n22, p51(1)

Dec 20, 1994

DOCUMENT TYPE: Brief Article ISSN: 0888-8507 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT

WORD COUNT: 450 LINE COUNT: 00035

of 3 feet? That type of unfortunate information leveling probably won't happen to your spreadsheet calculations if you use FuziCalc, Version 1.5. Rather than limiting spreadsheet cell values to single numbers, this \$199 windows spreadsheet works with a range of possible values , allowing FuziCalc to deal with the gray areas of business forecasting.

For example, if you're...

(Item 5 from file: 47) DIALOG(R)File 47:Gale Group Magazine DB(TM) (c) 2007 The Gale group. All rts. reserv.

03970240 SUPPLIER NUMBER: 14482744 (USE FORMAT 7 OR 9 FOR FULL TEXT) Risk forecasting based on spreadsheet data. (new version 3.0 of Decisioneering Inc.'s Crystal Ball add-in statistical analysis software package) (Software Review) (Evaluation)

Ross, Randy

PC World, v11, n11, p112(1) Nov, 1993

. .

DOCUMENT TYPE: Evaluation ISSN: 0737-8939 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 449 LINE COUNT: 00035

spreadsheet and typical forecasting packages can't handle as easily.

To use this add-in, define a range of values for spreadsheet cells containing variables that you're uncertain of and from the 16 probability distributions, or statistical...

..clearly explains which distributions to use when.) You can assign distinct distributions to the different variables in your spreadsheet. After defining a distribution for the variables, you define the affected formulas and run a simulation. The program plugs random values from the defined range of variables into the formulas, recalculates the entire spreadsheet, and records the outcome. You can view the...

20/3, K/22(Item 15 from file: 47) DIALOG(R) File 47: Gale Group Magazine DB(TM) (c) 2007 The Gale group. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULL TEXT) SUPPLIER NUMBER: 05223312 A 1-2-3 wish list. (electronic spreadsheet) Howard, Bill; Seymour, Jim; Taylor, Jared PC Magazine, v6, p154(4) Oct 27, 1987

LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT WORD COUNT: LINE COUNT: 00190 2664

able to pick any foreground/background combination; also, to use color to indicate negative numbers, numbers above or below a certain limit, numbers that changed with the last recalc, cells to be filled in by an associate, cells associated with a specific range, cell dependencies, or annotated cells.

Cell description window. If you have / Worksheet Titles turned off, you should have a tiny window that shows the label at the...

 $20/3, \kappa/24$ (Item 17 from file: 47) DIALOG(R) File 47: Gale Group Magazine DB(TM) (c) 2007 The Gale group. All rts. reserv.

02949052 SUPPLIER NUMBER: 04753203 (USE FORMAT 7 OR 9 FOR FULL TEXT) 1-2-3 add-on solves optimization, goal-seeking problems. (evaluation)

Bryan, Marvin PC Week, v4, p91(1) March 24, 1987

. . . . .

DOCUMENT TYPE: evaluation LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT 565 LINE COUNT: 00043 WORD COUNT:

a blank template form that must be filled out. After constructing the 1-2-3 worksheet required for the problem, the user turns to the template to list variable cells with upper - and lower - value limit that are acceptable. In the case of an optimization problem, a target cell is then specified. For goal solution problems, "find conditions' are

stated. Then both Shift keys...

20/3, K/34(Item 3 from file: 148) DIALOG(R) File 148: Gale Group Trade & Industry DB (c)2007 The Gale Group. All rts. reserv.

09009257 SUPPLIER NUMBER: 18684212 (USE FORMAT Simulation modeling and DOE. (design of experiments) (USE FORMAT 7 OR 9 FOR FULL TEXT)

Porcaro, Dino

IIE Solutions, v28, n9, p24(7)

Sep, 1996

ISSN: 1085-1259 LANGUAGE: English RECORD TYPE: Fulltext: Abstract WORD COUNT: 4172 LINE COUNT: 00332

Operators. The corresponding equation was entered for %Idle referencing the same Barrels Available and Operators cells. Constraints, including the desired limits on the %Idle equation, and limits on the range of values for Barrels Available and Operators were entered. Executing the Solver tool yielded an optimized value for the target cel A copy of the Excel spread sheet and the answer report generated by Solver is also shown in Figure 6.

Conclusion The...

20/3,K/45 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2007 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 15019640 (USE FORMAT 7 OR 9 FOR FULL TEXT) Need a powerful tool for statistical analysis? Look into Crystal Ball 3.0 (Decisioneering Inc.'s statistical software) (Software Review) (Evaluation)

Gilliland, Steve Computer Shopper, v14, n2, p508(1)

Feb, 1994

DOCUMENT TYPE: Evaluation ISSN: 0886-0556 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 439 LINE COUNT: 00034

that's a small price to pay for Crystal Ball's common-sense power. Ordinary spreadsheets show you what happens if you change the value of a cell or cells in your spreadsheet, while Crystal Ball creates a Monte Carlo simulation. You enter a range of values for each variable cell, then Crystal Ball generates random values within the limits you've set, running simulations hundreds or thousands of times while you watch. Results become...

20/3,K/47 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2007 The Gale Group. All rts. reserv.

01602239 SUPPLIER NUMBER: 13923127 (USE FORMAT 7 OR 9 FOR FULL TEXT) Sliders & Dials adds bells, whistles, and sliders to Excel. (Golden Technologies Inc.'s slide bar and dial software for Microsoft Excel spreadsheet software) (Software Review) (Evaluation)

Falkner, Mike Computer Shopper, v13, n7, p728(1)

July, 1993

. . . .

DOCUMENT TYPE: Evaluation ISSN: 0886-0556 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 437 LINE COUNT: 00031

box is straightforward, requesting the type of slider (vertical, horizontal, or a circular dial), the upper and lower limits for the value, the increment for every move of the slider, and a name for the window. As with an Excel spreadsheet cell, you can format the slider values with decimal points, scientific notation, currency symbols, or percentages...

20/3,K/49 (Item 5 from file: 275) DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2007 The Gale Group. All rts. reserv.

01520320 SUPPLIER NUMBER: 12215364 (USE FORMAT 7 OR 9 FOR FULL TEXT) Decisioneering's Crystal Ball: statistics made easy. (Crystal Ball for Windows statistical software) (Software Review) (Evaluation)

Gilliland, Steve Computer Shopper, v12, n7, p498(2)

July, 1992

DOCUMENT TYPE: Evaluation ISSN: 0886-0556 LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1443 LINE COUNT: 00116

do that, Crystal Ball uses the "Monte Carlo simulation." a statistical technique that assigns random numbers conforming to user-defined ranges ("probability distributions" in the statistics trade) set

up for variable spreadsheet cells.

Crystal Ball runs the simulation, constantly generating new random numbers for variable cell values and recalculating the spreadsheet each time. It continues until told to stop--dozens, hundreds, or thousands of times. Results...

 $20/3, \kappa/55$ (Item 11 from file: 275) DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2007 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 06016014 (USE FORMAT 7 OR 9 FOR FULL TEXT) A 1-2-3 wish list. (improvement of Lotus 1-2-3 spreadsheets) Howard, Bill; Seymour, Jim; Taylor, Jared

PC Magazine, v6, n18, p154(4)

Oct 27, 1987

ISSN: 0888-8507 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT WORD COUNT: 2664 LINE COUNT: 00190

able to pick any foreground/background combination; also, to use color to indicate negative numbers, numbers above or below a certain limit, numbers that changed with the last recalc, cells to be filled in by an associate, cells associated with a specific range, cell dependencies, or annotated cells.

Cell description window. If you have / Worksheet Titles turned off, you should have a tiny window that shows the label at the...

20/3,K/56 (Item 12 from file: 275) DIALOG(R)File 275:Gale Group Computer DB(TM) (c) 2007 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 04722313 (USE FORMAT 7 OR 9 FOR FULL TEXT) 1-2-3 add-on solves optimization, goal-seeking problems. (Software Review) (evaluation)

Bryan, Marvin

PC Week, v4, n12, p91(1) March 24, 1987 DOCUMENT TYPE: evaluation

ISSN: 0740-1604

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 565 LINE COUNT: 00043

a blank template form that must be filled out. After constructing the 1-2-3 worksheet required for the problem, the user turns to the template to list variable cells with upper - and lower - value limits that are acceptable. In the case of an optimization problem, a target cell is then specified. For goal solution problems, "find conditions' are stated. Then both Shift keys...

```
File 348:EUROPEAN PATENTS 1978-2007/ 200731
           (c) 2007 European Patent Office
File 349:PCT FULLTEXT 1979-2007/UB=20070809UT=20070802
           (c) 2007 WIPO/Thomson
Set
          Items
                   Description
s1
        482633
                   CELL OR CELLS
S2
         28740
                   S1(5N)BOUND?
S3
       2058917
                   BOUND? OR LIMIT??? OR LIMITATION? ? OR RESTRICT? OR CONFIN-
                ??? OR CONFINEMENT? OR PROSCRIB? OR PRESCRIB? OR ALLOW? OR DE-
                FIN??? OR DEFINITION? OR FINITE OR CIRCUMSCRI?
        403040
S4
                   S3(5N)(VALUE OR VALUES OR DATA OR NUMBER? ? OR NUMERIC??)
S 5
         42039
                   S3(5N)VARIABLE? ?
                   S3(5N)(NUMERAL? ? OR DIGIT? ? OR INTEGER? ? OR DATUM? ?)
S6
          31732
               RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT? (START??? OR BEGIN???? OR COMMENC??? OR COMMENCEMENT?)(30N-)(TERMINAT??? OR END? ? OR ENDED OR ENDING? ? OR CONCLUD? OR -
S7
       1062183
S8
        224029
                CONCLUS?)
S9
        607751
                   (MAXIMUM? OR UPPER OR BOUNDMAX? OR MAXBOUND? OR HIGHEST OR
               GREATEST) (30N) (MINIMUM? OR LOWER OR BOUNDMIN OR MINBOUND? OR -
                LOWEST OR SMALLEST OR LEAST OR BOTTOM)
           4982
S10
                   MAXMIN OR MINMAX OR MIN(1W)MAX
         10319
S11
                   SPREADSHEET? OR SPREAD()SHEET? ?
S12
           1120
                   WORKSHEET? OR WORK()SHEET? ?
S13
          27173
                   S1(30N)S4:S6
                   ($2 OR $13)(50N)$7:$10
$14(100N)$11:$12
S14
           4407
S15
             42
          65888
                   ($2 OR $4:$6)(30N)$7:$10
$16(50N)$1
S16
S17
           3929
S18
             39
                   S17(100N)S11:S12
                   S15 OR S18
S19
             46
S20
             16
                   S19 AND AC=US/PR AND AY=(1963:2004)/PR
S21
             16
                   S19 AND AC=US AND AY=1963:2004
S22
             16
                   S19 AND AC=US AND AY=(1963:2004)/PR
S23
             34
                   S19 AND PY=1963:2004
S24
S25
             39
                   S20:S23
             39
                   IDPAT (sorted in duplicate/non-duplicate order)
IDPAT (primary/non-duplicate records only)
S26
? t26/5,k/8,21-22,30,34,37-39
 26/5, \kappa/8
                 (Item 8 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.
01662756
Method in connection with a spreadsheet program
Verfahren zum nutzen eines Kalkulationsblattes
Procede pour utiliser une feuille de calcul electronique
PATENT ASSIGNEE:
  Framtidsforum I & M AB, (4135930), Hallbygatan 34A, 752 28 Uppsala, (SE),
     (Applicant designated States: all)
INVENTOR:
  WALDAU, Mattias, Hallbygatan 34A, 752 28, UPPSALA, (SE)
LEGAL REPRESENTATIVE:
Holmberg, Nils Anders Patrik (94751), Dr Ludwig Brann Patentbyra AB P.O. Box 17192, 104 62 Stockholm, (SE)
PATENT (CC, No, Kind, Date): EP 1367514 A1 031203 (Basic)
APPLICATION (CC, No, Date): EP 2002100576 020529;
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS (V7): GÓ6F-Ó17/60
ABSTRACT EP 1367514 A1
     A method in connection with spreadsheet programs wherein a spreadsheet
```

is created 102 by a creator 100 on a computer having a display means, an entry device, and a processor for executing the spreadsheet program. The method is adapted to make the spreadsheet accessible to a remote user provided with a target computing environment device, and comprises the following steps:

a) compiling 103 the created spreadsheet in said computer by, in addition to conventional compilation, using a set of submodules, so that the compiled spreadsheet is a representation of the spreadsheet for the

target computing environment;

b) transferring the compiled spreadsheet to the target computing

environment device, and
c) enabling said remote user to use 101 the created spreadsheet, by using a target processing means in the target computing environment device without using the spreadsheet program. ABSTRACT WORD COUNT: 140

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 031203 Al Published application with search report 031210 A1 Title of invention (French) changed: 20031021 040225 A1 Date of request for examination: 20021128 040317 A1 Date of dispatch of the first examination Change: Examination: Examination:

report: 20040202

060329 Al Title of invention (German) changed: 20060329 060329 Al Title of invention (English) changed: 20060329 060329 Al Title of invention (French) changed: 20060329 Change: Change: Change: LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count 983 CLAIMS A (English) 200349 (English) 12077 SPEC A 200349 Total word count - document A 13060 Total word count - document B Total word count - documents A + B 13060

- ...SPECIFICATION which are executed in response to the event. For each input and output of the spreadsheet, a corresponding user interface component will be generated. The outputs will normally be connected to...
- ...a function that ensures that the value entered is legal. Examples of validations are only **numbers** allowed , only numbers within a certain allowed, only "Yes" or "No" allowed.

Figure 8 illustrates the method in more detail. The steps between 800 and 809 are repeated for each input cell . In 801 we check if the input parameter is a Boolean, if so, the corresponding...

...90% piece can be presented.

These graphical components can either be grouped as the original spreadsheet, with borders between, or they can be stacked so that the result is a traditional form.

In many spreadsheet programs, there are a lot of additional properties associated with a cell. Examples are: \* Locked...

- ...color of the text, the color of the background, the type of borders around the cell . The color can also depend on the value of the cell for example, values below 10 should be green, values between 10 and 20 orange, and...
- ...be red. \* Validation: There are many different forms of validation. Some examples \* o Only allow certain predefined values . Normally these are selected from a pull-down menu.

```
* o Number must be within a predefined range
    o Only whole numbers are allowed, no decimal
    o Text must have a specified size.
  * o Dates have to be within a certain range . * o Number must be within a calculated range .
  * o Whether or not a value is allowed is decided by calculating a formula. The formula calculates a logical value (TRUE for valid...
                  (Item 21 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.
00369150
A spreadsheet system.
Elektronisches Kalkulationsblattsystem.
Systeme pour une feuille de calcul electronique.
PATENT ASSIGNEE:
  International Business Machines Corporation, (200120), Old Orchard Road,
    Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
  Kanai, Naoki Mezondohru Azari 202gohshitsu, 2ban 18goh, Kohenjikita
    4-chome Suginami-ku, Tokyo, (JP)
LEGAL REPRESENTATIVE:
  Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual
    Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
ENT (CC, No, Kind, Date): EP 358492 A2 900314 (Basic)
EP 358492 A3 910529
PATENT (CC, No, Kind, Date):
                                   EP 89309043 890906;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): JP 88224449 880909
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS (V7): G06F-015/21; G06F-009/45; G06F-015/20;
CITED PATENTS (EP A): US 4398249 A
CITED REFERENCES (EP A):
E.M. BARAS: "Guide to using lotus 1-2-3", 2nd edition, 1986, pages
     141-144, Osborne McGraw-Hill, Berkeley, California, US;
ABSTRACT EP 358492 A2
    A spreadsheet system comprising:
   a display means for displaying a spreadsheet;
   a means for inputting relations of a plurality of cells and cell values
  of said spreadsheet;
   a means for establishing a model including a relational node
  corresponding to the inputted relation, a cell node corresponding to the cell on which said relation is satisfied, an arc linking said relational
  node with said cell node, and a description describing a propagating
  direction of a change based on the input of said cell value through said
  arc;
   a means for marking on said calculation model one path or all of a
  plurality of paths through which the changes based on the input of said
  cell value are propagated;
   a means for determining one of said paths in accordance with
  predetermined rules;
  a means for performing a recalculation based on said input cell value in accordance with said determined path; and a means for reflecting the performed result of the recalculation of said
  spreadsheet.
ABSTRACT WORD COUNT: 166
LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application:
                     900314 A2 Published application (A1with Search Report
                     ;A2without Search Report)
900919 A2 Date of filing of request for examination:
 Examination:
                                 900723
```

910529 A3 Separate publication of the European or

Search Report:

International search report

Change: 910703 A2 International patent classification (change)

Change: 910703 A2 Obligatory supplementary classification

(change)

Examination: 940615 A2 Date of despatch of first examination report:

940428

Refusal: 970409 A2 Date on which the European patent application

was refused: 961118

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A (English) EPABF1 431 SPEC A EPABF1 5249 (English) Total word count - document A 5680 0

Total word count - document B Total word count - documents A + B 5680

... SPECIFICATION the apparatus capable of recalculation in both directions.

So far, there has been known a spreadsheet program language program in which a table is constructed by a plurality of cells prepared...

...value cell", and the cell referred to in the function formula is called a "variable value cell". Fig. 26 shows exemplified definitions of the function, formulas. Each of the cell names is the same as that employed in Lotus 1-2-3. At the upper row of the each cell the cell value displayed on the screen is shown. At the lower row the value def in the cell or the function formula is shown. In this example, the defined function formula A1\*A2

is defined for the function value cell B1. In case the value of the variable value cell is changed, the value of the function value cell is automatically recalculated by reevaluating the function formula. For instance, when the value of the variable value cells A1 and A2 are changed to 5 and 16, respectively, as shown in Fig. 27...

26/5, K/22(Item 22 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2007 European Patent Office. All rts. reserv.

00312998

Computer system for advanced financial applications Rechnersystem fur fortschrittliche finanzielle Anwendungen Systeme d'ordinateur pour applications financieres avancees PATENT ASSIGNEE:

HYPERION SOFTWARE OPERATIONS INC., (982560), Corporation Trust Center, 1209 Orange Street, Wilmington, (US), (applicant designated states: DE:FR:GB)

**INVENTOR:** 

Lyons, Richard J., 288 Lindbergh Street, West Hempstead New York 11552. (US)

Nolan, Kevin F., 75-48 Juniper Valley Road, Middle Village New York 11379 (US)

Chu, Wah C., 145 Primrose, Fairfield Connecticut, (US) LEGAL REPRESENTATIVE:

Naismith, Robert Stewart et al (57811), CRUIKSHANK & FAIRWEATHER 19 Royal Exchange Square, Glasgow, G1 3AE Scotland, (GB)

EP 294187 A2 881207 (Basic) PATENT (CC, No, Kind, Date):

EP 294187 Α3 920708 EP 294187 B1 960814

APPLICATION (CC, No, Date): EP 88305017 880601;

PRIORITY (CC, No, Date): US 55823 870601

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): G06F-017/60;

```
CITED REFERENCES (EP A):
  MINI-MICRO SYSTEMS vol. 18, no. 14, November 1985, NEWTON, MASSACHUSETTS, USA pages 81 - 85; RICK FRIEDMAN: 'Integrated Computer System Controls
     Financial Center
  BUSINESS SOFTWARE vol. 4, no. 7, July 1986, pages 48 - 51; MARVIN BRYAN: 'More like Lotus than Lotus'
  ADMINISTRATIVE MANAGEMENT vol. 47, no. 2, February 1986, page 20; DAVID
  BRODWIN: 'Next Generation Personal Computer Database Package'
PC MAGAZINE 15 April 1986, pages 227 - 229; THOMAS A. MEYERS: 'Using Spreadsheets to monitor your portofolio';
ABSTRACT EP 294187 A2
     An advanced financial reporting and analysis software package is
  described. The package collects, organizes, manages and consolidates financial data and provides user defined capabilities for creating
   financial and corporate reports. Financial data is organized into four
  business classifications or dimensions: Schedule, Entity, Period and Type. Data is stored in the system in such a way that all data associated with a particular Schedule, Entity, Period and Type is identified by that particular SEPT value. To accommodate automatic data entry, a mapping means or template is provided that specifies for each different input spreadsheet the location of the first data cell in the spreadsheet and the size of the spreadsheet. Data is read from the data store by various report and spreadsheet generating functions which convert data associated
   report and spreadsheet generating functions which convert data associated
  with particular SEPT values to desired output formats.
  original document)
ABSTRACT WORD COUNT: 144
LEGAL STATUS (Type, Pub Date, Kind, Text):
                         881207 A2 Published application (Alwith Search Report
 Application:
                                        ;A2without Search Report)
                          920513 A2 Representative (change)
 Change:
                         920708 A3 Separate publication of the European or
 Search Report:
                                        International search report
 Examination:
                         930310 A2 Date of filing of request for examination:
                                        930108
                          940216 A2 Date of despatch of first examination report:
 Examination:
                                        931230
                          960327 A2 Applicant (name, address) (change)
*Assignee:
                          960814 B1 Granted patent
 Grant:
                         970806 B1 No opposition filed
 Oppn None:
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text
                      Language
                                      Update
                                                    Word Count
        CLAIMS A
                       (English)
                                                      1325
                                      EPABF1
        CLAIMS B
                       (English)
                                      EPAB96
                                                      1568
        CLAIMS B
CLAIMS B
                                      EPAB96
                                                      1469
                        (German)
                        (French)
                                      EPAB96
                                                      1650
        SPEC A
                       (English)
                                                     12004
                                      EPABF1
                       (English) EPAB96
                                                     12153
        SPEC B
Total word count - document A
                                                     13330
Total word count - document B
                                                     16840
Total word count - documents A + B
                                                     30170
...CLAIMS the output of consolidated financial data.
       12. A method of generating in a computer a spreadsheet of financial
        information comprising the steps of:
storing said financial information in a first format...
...of a plurality of financial data values is associated with a set of
        identifying attributes,
        defining for each said financial data value which identifies it
                                                                                 value a range
        generating a reference file which associates the financial data values stored in said storage means with individual cells of
```

said **spreadsheet**, said reference file comprising coded headings for said **spreadsheet** which specify by **range** value and identifying attribute the financial data values to be located in the individual cells of the **spreadsheet**, and

...CLAIMS data.

7. The method of any one of the preceding claims, comprising the steps of:

defining for each said financial data value a range value which identifies it, said range value including a pointer to the data cell in which said data value is stored;

generating a reference file which associates the financial data values stored in said storage means with individual cells of a spreadsheet, said reference file comprising coded headings for said spreadsheet which specify by range value and identifying attribute the financial data values to be located in the individual cells of the spreadsheet; and

using said reference file to generate the **spreadsheet** . 8. The method of claim 7, wherein the coded headings comprise:

a value that specifies...

Filing Language: English Fulltext Availability:
Detailed Description

26/5, K/30(Item 30 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2007 WIPO/Thomson. All rts. reserv. 01067726 \*\*Image available\*\* METHOD AND APPARATUS FOR AUTOMATICALLY PRODUCING SPREADSHEET-BASED MODELS PROCEDE ET APPAREIL DE PRODUCTION AUTOMATIQUE DE MODELES FONDES SUR UN **TABLEUR** Patent Applicant/Assignee: DECISION CURVE LIMITED, Panniers Estate, Wookey, Somerset BA5 1NL, GB, GB (Residence), GB (Nationality), (For all designated states except: US) Patent Applicant/Inventor: ORCHARD Andrew Clive, Old Quarry View, Higher Street, West Chinnock, Crewekerne, Somerset TA18 7QA, GB, GB (Residence), GB (Nationality), (Designated only for: US) BRISTOW Geoffrey John, Panniers Farm, Castle Lane, Wookey, Somerset BA5 1NL, GB, GB (Residence), GB (Nationality), (Designated only for: US) Legal Representative: MACKENZIE Andrew Bryan (agent), Sommerville & Rushton, 45 Grosvenor Road. St Albans AL1 3AW, Hertfordshire, GB, Patent and Priority Information (Country, Number, Date):
Patent: WO 200398500 A1 20031127 (WO 0398500) Application: WO 2002GB2211 20020516 (PCT/WO GB0202211) Priority Application: WO 2002GB2211 20020516 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-017/60 Publication Language: English

Claims
Fulltext Word Count: 7684

English Abstract
A designer builds a condensed, generic form of a spreadsheet which is a definition file. This can be designed in Microsoft Excel, following a set of guidelines, or using a high level symbolic language. If required, HTML files can be produced directly from the Excel definition file to enable the user to input parameters using a web browser. A user defines a various parameters that are to be used for their particular spreadsheet and the software of the present invention expands the template's rows and columns according to those requirements, working out the effect on the formulae and linked cells as this takes place. Behind the scenes a set of information tables are built, either in memory or in a file, based on the information in the definition file. These tables are processed in a structured way to build the spreadsheet formulae, reference other tables and build any objects required to operate the model. Formulae are copied and/or rebuilt depending on the circumstances in which they will be used. In addition, the data input areas of the spreadsheet can be separated onto another worksheet to facilitate usability. Reports and charts can be adjusted to suit the data. Several templates or definitions can be combined into one spreadsheet and other objects, e.g. drop down lists and scrollbars, can be added to enhance usability. VBA code can also be included to perform complex operations not normally available in a spreadsheet. Definition libraries that describe, or contain a copy of, a part of the model can be added seamlessly, for example, a bar chart with a particular colour scheme or a complicated calculating function. The definition library can also contain VBA code, which can become part of the finished model and can add to its functionality.

French Abstract

Selon l'invention, un Designer permet de creer une forme condensee et generique d'un tableur qui est un fichier de definition. Ce fichier peut etre concu sur Microsoft Excel, suivant un ensemble d'instructions, ou au moyen d'un langage symbolique d'un niveau eleve. Si besoin, des fichier HTML peuvent etre produits directement a partir d'un fichier de definition d'Excel de facon a permettre a l'utilisateur d'entrer des parametres au moyen d'un navigateur Web. Un utilisateur definit les divers parametres qui doivent etre utilises pour leur tableur particulier et le logiciel de l'invention elargit les rangees et colonnes du modele selon les besoins, tout en mettant au point l'effet sur les formules et les cellules. Un ensemble de tableaux d'informations sont crees derrière les cellules. Un ensemble de tableaux d'informations sont crees derrière les scenes, soit dans la memoire soit dans un fichier, a partir des informations du fichier de definition. Ces tableaux sont traites de maniere structuree de facon a construire les formules de tableur, de facon a referencer d'autres tableaux et de facon a creer tout type d'objets requis pour faire fonctionner le modele. Des formules sont copiees et/ou recreees selon les circonstances dans lesquelles elles seront utilisees. De plus, les zones d'entree de donnees du tableur peuvent etre separees sur une autre feuille de calcul pour en faciliter l'utilisation. Des rapports et des diagrammes peuvent etre regles pour adapter les donnees. Plusieurs modeles ou definitions peuvent etre combines dans un tableur et d'autres objets, tels que des listes deroulantes et des barres de defilement, peuvent etre ajoutes pour ameliorer la facilite d'utilisation. Un code VBA (Microsoft Visual Basic for Applications) peut etre integre egalement pour executer des operations complexes qui ne sont pas disponibles normalement dans un tableur. Des bibliotheques de definitions qui decrivent ou contiennent une copie d'une partie du modele peuvent etre ajoutees en continu, p. ex., un diagramme a barres ayant un schema de couleur particulier ou une fonction de calcul compliquee. La bibliotheque de definitions peut contenir egalement un code VBA, qui peut devenir une partie d'un modele fini et qui peut y ajouter sa fonctionnalite.

Publication 20031127 A1 With international search report. Examination 20031224 Request for preliminary examination prior to end of 19th month from priority date

Patent and Priority Information (Country, Number, Date):

... 20031127 Patent:

Fulltext Availability: Detailed Description Publication Year: 2003

Detailed Description

g. a bar or line chart), being permanently connected to the same cells in the worksheets .

The example below is described in connection with a chart object. However, a worksheet object...

...index number starting, for example, with 1.

The Switch 36 is normally on a single worksheet and consists of three parts; a range of cells 36-1 linked to the chart 30 called the data area, an input cell 36-2 for the index number of the source- data range 30-1 as defined in the table and a series of cells 36-3 used to return data from one row of the table 32 according to the index number in the index cell 36 The data area 36-1 is of sufficient size suitable for it to display any of the source-data ranges referenced in the table 32. The index number can be inserted into the input cell...

26/5, K/34(Item 34 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2007 WIPO/Thomson. All rts. reserv.

\*\*Image available\*\* DEFINING EXTERNAL PARAMETERS IN SPREADSHEETS SYSTEME ET PROCEDE POUR L'UTILISATION EFFICACE ET FLEXIBLE D'INFORMATION DE **TABLEUR** 

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KNOURENKO Andrey, 31-C Wycoma Way, Waltham, MA 02453, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

OCCHIUTI Frank R (agent), Fish & Richardson P.C., 225 Franklin Street, Boston, Massachusetts 02110-2804, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200307118 A2-A3 20030123 (WO 0307118)
Application: WO 2002US22004 20020712 (PCT/WO US0222004) Priority Application: US 2001305217 20010713; US 2002193015 20020711

Parent Application/Grant:

Related by Continuation to: US 2002 20020710 (CON)

Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): G06F-007/00

Publication Language: English Filing Language: English Fulltext Availability: Detailed Description

Claims

Fulltext Word Count: 12963

English Abstract

The present invention relates to utilizing a spreadsheet by defining a parameter external to the spreadsheet and associating the parameter with the spreadsheet to define a parameterized workbook (105). In one embodiment, this utilization further comprises storing a location of the spreadsheet and storing the name of the parameter in the same storage module as the result referencing one or more cells within the spreadsheet. This utilization further comprises receiving a value for the parameter and generating the result based at least in part on the value and the spreadsheet. It also comprises associating a type with value and the spreadsheet. It also comprises associating a type with the parameter. The type can define a range of values or attributes associated with the parameter.

#### French Abstract

Sous un premier aspect, la presente invention a trait a l'utilisation d'un tableur par la definition d'un parametre exterieur au tableur et par l'association du parametre au tableur en vue de definir un manuel parametre. Dans un premier mode de realisation, cette utilisation comporte en outre le stockage d'un emplacement du tableur et le stockage du nom du parametre dans le meme module de stockage que l'emplacement. Dans un autre mode de realisation, elle comprend la definition d'un resultat exterieur au tableur, le resultat designant une ou plusieurs cellules au sein du tableur. Dans un autre mode de realisation, cette utilisation comporte en outre la reception d'une valeur pour le parametre et le generation du resultat base au moins en partie sur la valeur et le tableur. Dans un autre mode de realisation, elle comporte en outre l'association d'un type au parametre. Le type peut definir une gamme de valeurs ou d'attributs associes au parametre.

Legal Status (Type, Date, Text)
Publication 20030123 A2 Without international search report and to be republished upon receipt of that report. Search Rpt 20030417 Late publication of international search report Republication 20030417 A3 With international search report.

Patent and Priority Information (Country, Number, Date): ... 20030123 Patent:

Fulltext Availability: Detailed Description

English Abstract

The present invention relates to utilizing a spreadsheet by defining a parameter external to the **spreadsheet** and associating the parameter with the **spreadsheet** to define a parameterized workbook (105). In one embodiment, this utilization further comprises storing a location of the spreadsheet and storing the name of the parameter in the same storage module as the result referencing one or more cells within the spreadsheet. This utilization further comprises receiving a value for the parameter and generating the result based at least in part on the value and the spreadsheet. It also comprises associating a type with the parameter. The type can define a range of values or attributes associated with the parameter.

Publication Year: 2003

Detailed Description of the workbook. To generate this parameterized workbook 105, the system 300 instantiates A data range of the system .300 associates a parameterized data query with a range of workbook cells . Each data query parameter is identified by name and/or position. Each query parameter has a type that constrains the allowable values for the parameter. Queries are expressed in a textual syntax that a user and/or administrator creates. A data range can also refer by name to a predefined query. A data range defines a set of query parameter value expressions using the spreadsheet formula language. There is one expression for each required query parameter in the query. The... 26/5, K/37(Item 37 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2007 WIPO/Thomson. All rts. reserv. \*\*Image available\*\* IMPROVEMENTS IN OR RELATING TO SPREADSHEETS AMELIORATIONS APPORTEES A OU RELATIVES A DES TABLEURS Patent Applicant/Assignee: ROKE MANOR RESEARCH LIMITED, Roke Manor, Old Salisbury Lane, Romsey Hampshire SO51 OZN, GB, GB (Residence), GB (Nationality), (For all designated states except: US) Patent Applicant/Inventor: HULBERT Anthony Peter, 48 Wilton Crescent, Shirley, Southampton SO15 7QH, GB, GB (Residence), GB (Nationality), (Designated only for: US) Legal Representative: FRENCH Clive Harry (agent), Siemens Shared Services Limited, Intellectual Property Dept., Siemens House, Oldbury, Bracknell, Berkshire RG12 8FZ, Patent and Priority Information (Country, Number, Date):
Patent: WO 200157744 A2-A3 **20010809** (WO 0157744)
Application: WO 2001GB427 20010202 (PCT/WO GB0100427) Priority Application: GB 20002291 20000202 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) CA US (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR Main International Patent Class (v7): G06F-017/60 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description Claims Fulltext Word Count: 1985 English Abstract Described herein is an improved spreadsheet which has at least the facility of storing data in a third dimension. In such a spreadsheet, multiple elements may be stored in a single cell. French Abstract La presente invention concerne un tableur ameliore, qui possede au moins le moyen de stocker des donnees dans une troisieme dimension. Dans un tel tableur, de multiples elements peuvent etre stockes dans une seule cellule. Legal Status (Type, Date, Text)
Publication 20010809 A2 Without international search report and to be

republished upon receipt of that report.

20011018 Request for preliminary examination prior to end of

Examination

19th month from priority date
Search Rpt 20020718 Late publication of international search report
Republication 20020718 A3 With international search report.
Republication 20020718 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Patent and Priority Information (Country, Number, Date):
Patent: ... 20010809

Fulltext Availability:
Detailed Description
Publication Year: 2001

Detailed Description

. .

... Al, A2, ..., B 1, B 2, ..., C 1, C2, ..., etc.

whilst having multiple sheets of spreadsheet type within one
document improves flexibility, it is restricting in that addressing
between sheets has...
...data
between sheets.

It is therefore an object of the present invention to provide a spreadsheet which allows the storacre of multiple data values in a single cell.

It is also an object of the present invention to allow for the processing of multiple data values in a single cell.

In accordance with one aspect of the present invention. there is ided a spreadsheet comprising a plurality of cells, at least one cell provi Z@ havincr more than one data value stored therein.

In accordance with another aspect...

...a plurality of data values into a single
SUBSTITUTE SHEET (RULE 26)
cell of a spreadsheet , the method comprising:- selecting a range of
sincyle value cells one cell wide; and copying said range into the single
cell...

...invention,
 there is provided a method of extracting data from a single cell of a
 spreadsheet which contains a plurality of data values, the method
 comprising:- selecting the single cell; and...

...invention,
there is provided a method of editing data in a single cell of a
spreadsheet which contains a plurality of data values, the method
comprising:- copying the data values from...

26/5,K/38 (Item 38 from file: 349) DIALOG(R)File 349:PCT FULLTEXT (c) 2007 WIPO/Thomson. All rts. reserv.

00778300 \*\*Image available\*\*
MACHINE VISION SENSOR UTILIZING SPREADSHEETS
CAPTEUR DE VISION ARTIFICIELLE
Patent Applicant/Assignee:
 COGNEX CORPORATION, One Vision Drive, Natick, MA 01760, US, US (Residence), US (Nationality)
Inventor(s):

MCGARRY John, 12395 SW Corylus, Portland, OR 97224, US, Legal Representative: POWSNER David J (et al) (agent), Nutter, McClennen & Fish LLP, One International Place, Boston, MA 02110-2699, US, Patent and Priority Information (Country, Number, Date):
Patent: WO 200111862 A2-A3 20010215 (WO 0111862)
Application: WO 2000US21787 20000809 (PCT/WO US0021787)
Priority Application: US 99370705 19990809; US 99370808 19990809; US 99370706 19990809; us 99160958 19991022; us 99169514 19991207 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) JP (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE Main International Patent Class (v7): G06F-015/00 International Patent Class (v7): G06F-015/76; G06F-015/80; G06F-017/00;
G06F-017/21; G06F-017/24 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description Claims Fulltext Word Count: 111205

#### English Abstract

. .

A machine vision sensor is provided that includes a processor (42); a camera for capturing images (43); and a display for displaying captured images to be analzyed (41), and for displaying a spreadsheet for analyzing the image (46). The spreadsheet is displayed in semi-transparent relationship with the image. A hand-held control pad (44) can be used as the sole input and control device for accessing a plurality of menus having various vision tools. The spreadsheet provides an easy-to-use environment and user interface for programming machine vision applications. The hand-held control pad can be used to navigate over the spreadsheet, thereby selecting cells of the spreadsheet (46). When a particular cell of the spreadsheet is selected, a change occurs in the appearance of the image displayed (47). The spreadsheet can be used to create a user interface for controlling analysis of the captured image.

#### French Abstract

La presente invention concerne un capteur de vision artificielle qui comprend un processeur, une camera permettant la capture d'images, et un afficheur destine a afficher les images capturees a analyser et destine a afficher un tableur de facon a analyser l'image. Ce tableur est affiche en semi-transparence avec l'image. Un boitier de commande manuel peut etre utilise, seul dispositif d'entree et de commande permettant d'acceder a une pluralite de menus possedant divers outils de vision. Le tableur offre un environnement facile a utiliser et une interface utilisateur permettant de programmer des applications de vision artificielle. Le boitier de commande manuel peut etre utilise pour naviguer dans le tableur, selectionnant de cette maniere les cellules du tableur. On peut aussi utiliser le boitier de commande pour selectionner les rubriques des menus, et pour selectionner des caracteres alphanumeriques comme parametres a entrer dans le tableur. Quand on a selectionne une cellule particuliere du tableur par l'intermediaire du boitier de commande, une modification survient dans l'apparence de l'image affichee, ou dans l'apparence d'une couche de graphique affichee en surimpression de l'image. On peut, de plus, utiliser ce tableur pour creer une interface utilisateur destinee a commander l'analyse de l'image capturee ou d'autres processus industriels. Cette interface utilisateur est particulierement interessante pour des applications de vision artificielle ou d'autres applications faisant appel a d'importants ensembles de donnees.

Legal Status (Type, Date, Text)
Publication 20010215 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20010823 Late publication of international search report 20010823 A3 With international search report.

Search Rpt 20010823 Late publication of international search report 20010823 Late publication of international search report 20011025 Request for preliminary examination prior to end of 19th month from priority date

Correction 20020711 Corrected version of Pamphlet: pages 1/25-25/25,

Correction 20020711 Corrected version of Pamphlet: pages 1/25-25/25, drawings, replaced by new pages 1/26-26/26; due to late transmittal by the receiving Office

Republication 20020711 A3 With international search report.

Fulltext Availability:
Claims
Publication Year: 2001

#### Claim

- function's Show parameter to enable input graphics, result graphics, or both. NOTE Sometimes the worksheet grid can hide lines or points that happen to fall exactly under a grid line. The image is the bottom layer, the flyover graphics are the middle layer, and the worksheet is the top layer. COGIMEX k4l hf.'--.-.

  -4 A OR- GUL Show Graphics Option %en...
- ...the associated flyover graphics. By default, these graphics vanish when you move to a new **cell**, reducing visual clutter. If you want them to persist you can enable thent through the...
- ...between input graphics (which show the filtiction's parameters), result graphics (which show a measured value or other result.); and charts (which plot a histogram, score, or other value). For example...
- ...hide all Disables all graphics, which are visible only when you "fly over" the associated cell . The default. result graphics only Enables only the result graphics. input and result graphics Enables...cells. getactive cellrange Get enable state of cells. geteell cellrange Get cell definitions. getdim Get spreadsheet dimensions. getmax Get max row and col of cells . getvalue cellrange Get output value of cells . help Gets a fist of commands. setactive cellnum string Set enable state of cells . setcell cellnum string Set cell definitions . You can enter ?strings?, numeric values , or valid formulas. timeout x Milliseconds until command timeout trigger Get output value of cells . update Runjob. Parameters are: cellnum. Coordinates of cell in the spreadsheet . Case-insensitive. For example, O. cellrange. Coordinates of a cell or range of cells. For example, O or c7:el 3 string. A character string that defines...

### ...1

ADP, Acquire: Functions Reference The Acquisition functions and structures, automatically present on the worksheet in row 0, represent the image and the external input sources that can force the worksheet to update. For example, Acquirelmage(, located in cell \$A\$O, acquires an image--a fundamental...in a cell. Returns 1.00 when clicked, 0.00 otherwise. Remains adjustable when the worksheet is locked. Chart Puts a chart display in a cell, to plot the history of...

...00; when OFF 0 Typically referenced to set a toggled value. Remains adjustable when the worksheet is locked. ColorLabel Puts a text string of a specified color in a cell of...

...edit box control in a cell. Returns a floating-point value constrained to a specified range . Remains adjustable when the worksheet is locked. EditInt Puts a numeric edit box control in a cell . Returns an integer constrained to a specified range. Remains adjustable when the workshect is locked. EditStrin Puts a text edit box control in a cell. Returns a string limited to a specified maximum number of characters. Remains adjustable when the worksheet is locked. ListBox Puts a list box control in a cell . Returns the index of the selected list item. Remains adjustable when the worksheet is locked. Plot structure Stores a graphic. PlotArc Draws an arc graphic from a starting point to an ending point around a specified center point. PlotCircle Draws a circle graphic with a specified center...cell. Returns a floating-point value constrained to a specified range. Remains adjustable when the worksheet is locked.

Heading Graphics/Controls Syntax EditFloat(Min, Max)

. .

Inputs Min The minimum value for...

...Max The maximum value for the numeric selection graphic. Returns A floating-point value between Min and Max. Emits Nothing. Effors Inval Example

Comments This function gives you a way to let the operator input a floating-point value even when you lock the worksheet. The selection graphic remains adjustable even when the NOTE After you define a numeric selection graphic, you cannot click X on its cell as a shortcut for opening its property sheet. To reopen the property sheet@ you must...

...Returns an integer constrained to a specified range. The value remairis editable even when the worksheet is locked.

Heading Graphics/Controls Syntax EditInt(Min Max)

Inputs Min The minimum value for the integer selection graphic. Max The maximum value for the integer selection graphic. Returns An integer between Min and Max . Emits Nothing. Errors Invalid parameter. Appendix 1

199 nxx. ..... Comments This function gives you...

- ...to let the operator input an integer even when you lock the NOTE After you define a integer selection graphic, you cannot click X on its cell as a shortcut for opening its property sheet. To reopen the property sheet, you must...
- ...select Formula. See Also Button, Chart CheckBox. ColorLabel, Dialo EditFlo Ed6trin Lioox Gettin.e9arted with Worksheet Graphics. COGNEX I R -Si '44 A bo@ Graphics: EditString function Description Puts a text...
- ...Returns a string constrained to a specified range. The value reinains editable even when the worksheet is locked. Heading Graphics/Controls Syntax EditString(MaxStringLen) Inputs MaxStringLen Maximum length for the user...

```
File 347: JAPIO Dec 1976-2007/Mar(Updated 070809)
          (c) 2007 JPO & JAPIO
File 350:Derwent WPIX 1963-2007/UD=200751
          (c) 2007 The Thomson Corporation
Set
                  Description
         Items
S1
        770155
                  CELL OR CELLS
S2
          6157
                  S1(5N)BOUND?
       3894641
S3
                  BOUND? OR LIMIT??? OR LIMITATION? ? OR RESTRICT? OR CONFIN-
              ??? OR CONFINEMENT? OR PROSCRIB? OR PRESCRIB? OR ALLOW? OR DE-
              FIN??? OR DEFINITION? OR FINITE OR CIRCUMSCRI?
        347885
                  S3(5N)(VALUE OR VALUES OR DATA OR NUMBER? ? OR NUMERIC??)
S4
S5
         22601
                  S3(5N)VARIABLE? ?
S6
          6069
                  S3(5N)(NUMERAL? ? OR DIGIT? ? OR INTEGER? ? OR DATUM? ?)
                 RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT? (START??? OR BEGIN???? OR COMMENC??? OR COMMENCEMENT?)(30N-
S7
       1072926
s8
        125043
              )(TERMINAT??? OR END? ? OR ENDED OR ENDING? ? OR CONCLUD? OR -
              CONCLUS?)
S9
       1096754
                  (MAXIMUM? OR UPPER OR BOUNDMAX? OR MAXBOUND? OR HIGHEST OR
              GREATEST) (30N) (MINIMUM? OR LOWER OR BOUNDMIN OR MINBOUND? OR -
              LOWEST OR SMALLEST OR LEAST OR BOTTOM)
          2391
S10
                  MAXMIN OR MINMAX OR MIN(1W)MAX
s11
          2979
                  SPREADSHEET? OR SPREAD()SHEET? ?
           979
S12
                 WORKSHEET? OR WORK()SHEET? ?
S13
          7800
                  S4:S6(30N)S1
S14
          1897
                  ($2 OR $13) AND $7:$10
S15
            13
                  S14 AND S11:S12
         34383
s16
                  (S2 OR S4:S6)(30N)S7:S10
S17
          1277
                  $16 AND $1
S18
            15
                  S17 AND S11:S12
                  S15 OR S18
s19
            18
 19/69, \kappa/3
                 (Item 2 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.
0015851782 - Drawing available WPI ACC NO: 2006-383472/200640
XRPX Acc No: N2006-323014
Apparatus for controlling edit bar display size of electronic spreadsheet
Patent Assignee: ZHUHAI KINGSOFT CORP (ZHUH-N); ZHUHAI KINGSOFT SOFTWARE
          (ZHUH-N)
Inventor: CHEN B; WAN L; WANG H; ZHANG Q
Patent Family (2 patents, 2 countries)
Patent
                                  Application
Number
                  Kind
                         Date
                                  Number
                                                  Kind
                                                          Date
                                                                   Update
                       20060222
CN 1737792
                                  CN 200510035475
                                                        20050629
                                                                   200640
                                                   Α
                                                                            В
                                  US 2006479116
us 20070016850
                       20070118
                   Α1
                                                        20060629
                                                                   200708
Priority Applications (no., kind, date): CN 200510035475 A
                                                                   20050629
Patent Details
Number
                Kind
                       Lan
                              Pg Dwg
                                        Filing Notes
CN 1737792
                       ZH
  NOVELTY - This invention discloses one electrical form controlled edit
column display sizes, which is located in electrical form application main window module parallel with editing column. The device comprises control
edit column display status one sub device and second sub device with
display range of the designed content in edit column. The device runs to on
line monitor the edit module and get size datafrom said edit column.
```

Title Terms/Index Terms/Additional Words: APPARATUS; CONTROL; EDIT; BAR;

DISPLAY; SIZE; ELECTRONIC

Class Codes International Classification (+ Attributes) IPC + Level Value Position Status Version
 G06F-0017/24 A I F B 20060101 G06F-0017/00 F Α Ι В 20060101 G06F-0017/24 L C 20060101 I В G06F-0017/00 C I F B 20060101

US Classification, Issued: 715503000, 715504000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-J11A

Apparatus for controlling edit bar display size of electronic spreadsheet

Original Titles:

System for controlling the display size of a formula bar in a spreadsheet

Original Publication Data by Authority

Original Abstracts:

...invention discloses a system for controlling the display size of a formula bar in a spreadsheet . Application of this system will make operation of the spreadsheet more convenient. The system for controlling the display size of the formula bar and a formula bar module are parallel in a main window module of a **spreadsheet** application, and the system includes a sub-system I which controls the display state of...

...the size of the formula bar from the aforementioned formula bar module. If the acquired data exceed the prescribed range, then it issues a command to the aforementioned formula bar module requesting a change in... Claims:

what is claimed is:<b>1</b>. A method for displaying a content associated with a cell in a spreadsheet, the method comprising: displaying a spreadsheet including at least a cell; receiving a selection of the obtaining information associated with a content for the selected cell ;processing information associated with the content; displaying in a content region the content for the selected cell, the content region being associated with a region size; wherein: the content region and the selected cell are related to different physical locations; the region size is capable of being adjusted by...

19/69,K/10 (Item 9 from f DIALOG(R)File 350:Derwent WPIX (Item 9 from file: 350) (c) 2007 The Thomson Corporation. All rts. reserv.

0013087067

WPI ACC NO: 2003-167798/200316

XRPX Acc No: N2003-132544

Spreadsheet utilisation method by defining parameter external to spreadsheet and associating parameter with spreadsheet to define parameterised workbook

Patent Assignee: HANDSAKER R (HAND-I); KNOURENKO A (KNOU-I); NETVIEW TECHNOLOGIES INC (NETV-N); RASIN G (RASI-I)

Inventor: HANDSAKER R; KNOURENKO A; RASIN G Patent Family (5 patents, 95 countries) Patent

Application Number Kind Date Number Kind Date Update WO 2003007118 US 20030110191 20030123 wo 2002US22004 200316 Α2 20020712 US 2001305217 US 2002193015 Α1 20030612 Ρ 20010713 200340 Ε 20020711 AU 2002318298 A1 20030129 AU 2002318298 20020712 200452

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AU 2002318298
                    Α8
                         20051013 AU 2002318298
                                                             20020712
                                                                         200611
                                                         Α
US 7251776
                    B2 20070731 US 2001305217
                                                             20010713
                                                                         200751 E
                                     US 2002193015
                                                             20020711
Priority Applications (no., kind, date): US 2001305217 P 20010713; US 2002193015 A 20020711
Patent Details
Number
                  Kind
                        Lan
                                Pg
52
                                          Filing Notes
                                     Dwg
wo 2003007118
                        EN
                   Α2
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY
   BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
   IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
   NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA
   ZW
Regional Designated States,Original: AT BE BG CH CY CZ DE DK EA EE ES FI
   FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG
us 20030110191
                    Α1
                         ΕN
                                           Related to Provisional US 2001305217
                                                                     wo 2003007118
AU 2002318298
                                           Based on OPI patent
                    Α1
                         EN
AU 2002318298
                                           Based on OPI patent
                                                                     wo 2003007118
                    Α8
                         EN
us 7251776
                    В2
                         EN
                                           Related to Provisional US 2001305217
  Alerting Abstract WO A2
  NOVELTY - The method of using a spreadsheet involves defining a
parameter external to the spreadsheet and associating the parameter with the spreadsheet to define a parameterised workbook. A location of the spreadsheet may be stored and the name of the parameter may be stored in the same storage module as the location.

DESCRIPTION - INDEPENDENT CLAIMS are included for; a system for using a
spreadsheet; a method for using a number of spreadsheets; a method for
storing information associated with a spreadsheet .
  USE - Manipulating spreadsheet application programs.
  ADVANTAGE - Efficiently and flexibly using spreadsheet information. DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of a complex
model comprising of parameterised workbooks in accordance with the
invention..
  105 Parameterised workbook
  110 Parameterised module
  110 Parameter module
  115 Workbook module
  120 Results module
Title Terms/Index Terms/Additional Words: UTILISE; METHOD; DEFINE;
  PARAMETER; EXTERNAL; ASSOCIATE
Class Codes
International Classification (Main): G06F, G06F-007/00
International Classification (+ Attributes)
IPC + Level Value Position Status Version
  G06F-0017/24 A I
                            R 20060101
  G06F-0017/21 A I
                         F B
                                20060101
  G06F-0017/24 C I
G06F-0017/21 C I
                                20060101
                              R
                                 20060101
                              В
US Classification, Issued: 707503000, 715503000
File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J11G
Spreadsheet utilisation method by defining parameter external to spreadsheet and associating parameter with spreadsheet to define
```

parameterised workbook

Original Titles:

SYSTEM AND METHOD FOR EFFICIENTLY AND FLEXIBLY UTILIZING SPREADSHEET INFORMATION...

- ...Defining external parameters in spreadsheets
- ...System and method for efficiently and flexibly utilizing spreadsheet information...
- ...System and method for efficiently and flexibly utilizing spreadsheet information...
- ...SYSTEM AND METHOD FOR EFFICIENTLY AND FLEXIBLY UTILIZING SPREADSHEET INFORMATION

Alerting Abstract ...NOVELTY - The method of using a spreadsheet involves defining a parameter external to the spreadsheet and associating the parameter with the spreadsheet to define a parameterised workbook. A location of the spreadsheet may be stored and the name of the parameter may be stored in the same...

DESCRIPTION - INDEPENDENT CLAIMS are included for; a system for using a spreadsheet; a method for using a number of spreadsheets; a method for storing information associated with a spreadsheet.

- ...USE Manipulating spreadsheet application programs...
- ...ADVANTAGE Efficiently and flexibly using **spreadsheet** information Original Publication Data by Authority

#### Original Abstracts:

In one aspect, the present invention relates to utilizing a spreadsheet by defining a parameter external to the spreadsheet and associating the parameter with the spreadsheet to define a parameterized workbook. In one embodiment, this utilization further comprises storing a location of the spreadsheet and storing the name of the parameter in the same storage module as the location. In another embodiment, it includes defining a result external to the spreadsheet, the result referencing one or more cells within the spreadsheet. In another embodiment, this utilization further comprises receiving a value for the parameter and generating the result based at least in part on the value and the spreadsheet. In another embodiment, it further comprises associating a type with the parameter. The type can define a range of values or attributes associated with the parameter...

...In one aspect, the present invention relates to utilizing a spreadsheet by defining a parameter external to the spreadsheet and associating the parameter with the spreadsheet to define a parameterized workbook. In one embodiment, this utilization further comprises storing a location of the spreadsheet and storing the name of the parameter in the same storage module as the location. In another embodiment, it includes defining a result external to the spreadsheet, the result referencing one or more cells within the spreadsheet. In another embodiment, this utilization further comprises receiving a value for the parameter and generating the result based at least in part on the value and the spreadsheet. In another embodiment, it further comprises associating a type with the parameter. The type can define a range of values or attributes associated with the parameter...

...In one aspect, the present invention relates to utilizing a **spreadsheet** by defining a parameter external to the **spreadsheet** and associating the parameter with the **spreadsheet** to define a parameterized workbook. In one embodiment, this utilization further comprises storing a location of the **spreadsheet** and storing the name of the parameter in the same storage

module as the location. In another embodiment, it includes defining a result external to the spreadsheet, the result referencing one or more cells within the spreadsheet. In another embodiment, this utilization further comprises receiving a value for the parameter and generating the result based at least in part on the value and the spreadsheet. In another embodiment, it further comprises associating a type with the parameter. The type can define a range of values or attributes associated with the parameter... Claims:

What is claimed is: [A Parameterized Workbook] <b>1 </b>. A method for utilizing a spreadsheet, the method comprising:defining a parameter external to the spreadsheet; and associating the parameter with the spreadsheet to define a parameterized workbook...

...What is claimed is:1. A method for utilizing a spreadsheet, the method comprising: defining a parameter external to the spreadsheet; associating the parameter with the spreadsheet at design time to define a parameterized workbook, wherein the parameter applies to the spreadsheet as a whole, thereby allowing any formula in the spreadsheet to reference the parameter; receiving a value for the parameter at run time; computing cell values in the spreadsheet that are dependent, directly or indirectly, on parameter; andrendering an output based on the computed cell values.

? t19/69,k/16

19/69,K/16 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0008025192 - Drawing available WPI ACC NO: 1997-118592/199711 XRPX ACC NO: N1997-097738

Interactive formula compiler and range estimating method - involves breaking down formula into sequence of primitive operations, estimating bounds for each operation and evaluating each formula as sequence of interval operations

Patent Assignee: SCHLAFLY R (SCHL-I)

Inventor: SCHLAFLY R

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update US 5600584 A 19970204 US 1992945262 A 19920915 199711 B

Priority Applications (no., kind, date): US 1992945262 A 19920915

Patent Details

Number Kind Lan Pg Dwg Filing Notes US 5600584 A EN 18 9

Alerting Abstract US A

The computer implemented method for estimating the **range** of a numeric formula in an interactive computer program involves representing real numbers as intervals. The formula is broken down into a sequence of primitive operations.

Bounds for each operation are estimated using the directed operations of an IEEE floating point arithmetic processor. Decimal numbers are converted precisely. Each interval is displayed in a cell and the formula is evaluated as a sequence of interval operations.

USE/ADVANTAGE - Systematically and efficiently handles numerical errors in interactive **spreadsheet** -type computer program. Provides strict rigorous bounds for numeric outputs. compiles **spreadsheet** formulas into native code which is significantly more efficient than p-code.

Title Terms/Index Terms/Additional Words: INTERACT; FORMULA; COMPILE; RANGE; ESTIMATE; METHOD; BREAK; DOWN; SEQUENCE; PRIMITIVE; OPERATE;

BOUND; EVALUATE; INTERVAL

Class Codes

International Classification (Main): G06F-007/38 (Additional/Secondary): G06F-011/30, G06F-003/14 US Classification, Issued: 364745000, 364736000, 364736500, 395764000,

395183140

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05A; T01-J04; T01-J11G; T01-S01A

Interactive formula compiler and range estimating method...

Original Titles:

Interactive formula compiler and range estimator.

Alerting Abstract ... The computer implemented method for estimating the range of a numeric formula in an interactive computer program involves representing real numbers as intervals...

...floating point arithmetic processor. Decimal numbers are converted precisely. Each interval is displayed in a cell and the formula is evaluated as a sequence of interval operations...

...USE/ADVANTAGE - Systematically and efficiently handles numerical errors in interactive spreadsheet -type computer program. Provides strict rigorous bounds for numeric outputs. compiles spreadsheet formulas into native code which is significantly more efficient than p-code.

Title Terms.../Index Terms/Additional Words: RANGE:

Original Publication Data by Authority

#### Claims:

A computer-implemented method for estimating the range of a numeric formula in an interactive computer program, comprising representing real numbers as intervals; breaking the formula into a sequence of primitive operations; estimating bounds for each primitive operation; converting decimal numbers precisely; displaying each interval in a cell; and evaluating said formula as a sequence of interval operations. ? t19/69,k/17-18

19/69,K/17 (Item 16 from DIALOG(R)File 350:Derwent WPIX (Item 16 from file: 350) (c) 2007 The Thomson Corporation. All rts. reserv.

0007041885 - Drawing available WPI ACC NO: 1995-060709/199508

XRPX ACC NO: N1995-048321

Fuzzy spreadsheet data processing system - stores representations of fuzzy numbers in cells of spreadsheet, operates on fuzzy numbers and displays numbers in spreadsheet and graphical format

Patent Assignee: FUZIWARE INC (FUZI-N)

Inventor: THORNDIKE K E; VRBA J A

Patent Family (1 patents, 1 countries) Patent Application

Number Kind Date Number Kind Update Date US 5381517 19950110 US 1992949268 A 19920921 199508 B

Priority Applications (no., kind, date): US 1992949268 A 19920921

Patent Details

Kind Lan Number Pg Dwg Filing Notes US 5381517 ΕN 16 1Ŏ Α

Alerting Abstract US A

The data processing system includes a memory storing instructions and data. A fuzzy **spreadsheet** is stored in memory and has a number of **cells**, preferably arranged in columns and rows. The processor, stored instructions and stored data comprise a controller that receives input data and stores representations in **cells**. These representations include representations of fuzzy values. Operations, such as arithmetic operations, are performed on the data stored in the **cells**, including the fuzzy values, to produce derived representations that are stored in the **cells** and may be fuzzy values or crisp numbers or text.

To facilitate a user's appreciation of a particular fuzzy number, the spreadsheet selectively simultaneously displays two representations of a fuzzy value, namely, a centroid and a graph. Also, the processor converts crisp numbers to fuzzy numbers by a procedure whereby a gallery of graphs stored in memory is displayed and, in response to user commands, at least three crisp numbers are associated with the graph. The processor also defuzzifies numbers by replacing a representation of a fuzzy number in a cell of the spreadsheet with a centroid.

USE/ADVANTAGE - Inputting, processing and outputting data in **spreadsheet** having rows and columns of **cells** for containing numbers, text or formulas.

Title Terms/Index Terms/Additional Words: FUZZ; DATA; PROCESS; SYSTEM; STORAGE; REPRESENT; NUMBER; CELL; OPERATE; DISPLAY; GRAPHICAL; FORMAT

Class Codes

International Classification (Main): G06F-009/44 US Classification, Issued: 395061000, 395900000, 395076000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F06; T01-J11; T01-J16B

Fuzzy spreadsheet data processing system...

...stores representations of fuzzy numbers in cells of spreadsheet, operates on fuzzy numbers and displays numbers in spreadsheet and graphical format

Original Titles:
Fuzzy spreadsheet data processing system

Alerting Abstract ...The data processing system includes a memory storing instructions and data. A fuzzy spreadsheet is stored in memory and has a number of cells, preferably arranged in columns and rows. The processor, stored instructions and stored data comprise a controller that receives input data and stores representations in cells. These representations include representations of fuzzy values. Operations, such as arithmetic operations, are performed on the data stored in the cells, including the fuzzy values, to produce derived representations that are stored in the cells and may be fuzzy values or crisp numbers or text...

- ...To facilitate a user's appreciation of a particular fuzzy number, the spreadsheet selectively simultaneously displays two representations of a fuzzy value, namely, a centroid and a graph...
- ...The processor also defuzzifies numbers by replacing a representation of a fuzzy number in a cell of the spreadsheet with a centroid...
- ...USE/ADVANTAGE Inputting, processing and outputting data in spreadsheet having rows and columns of cells for containing numbers, text or formulas.

Title Terms.../Index Terms/Additional Words: CELL;

#### Original Publication Data by Authority

Original Abstracts:

A data processing system includes a memory with instructions and data stored therein. A fuzzy spreadsheet is stored in memory and has a plurality of cells, preferably arranged in columns and rows. The processor, stored instructions and stored data comprise a controller that receives input data and stores representations in cells. These representations include representations of fuzzy values. Operations, such as arithmetic operations, are performed on the data stored in the cells, including the fuzzy values, to produce derived representations that are stored in the cells and may be fuzzy values or crisp numbers or text. To facilitate a user's appreciation of a particular fuzzy number, the spreadsheet selectively simultaneously displays two representations of a fuzzy value, namely, a centroid and a graph. Also, the processor converts

...The processor also defuzzifies numbers by replacing a representation of a fuzzy number in a cell of the spreadsheet with a centroid. Claims:

A data processing system for inputting, processing and outputting data in a spreadsheet having rows and columns of cells for containing numbers, text or formulas and wherein the contents of each cell are selectively definable as the result of operations on one or more of the other cells such that changing the contents of one cell selectively impacts other cells, comprising: a memory; said memory for holding stored instructions and stored data, said stored instructions and stored data including a data processing representation of said fuzzy spreadsheet including a plurality of cells for holding data; a processor for processing data; input means for producing input data and input instructions in response to a user including means for allowing a user to define and input a fuzzy number as an element of said fuzzy spreadsheet; said processor and memory further comprising: a controller for receiving input data and input instructions and in response thereto for producing and storing data in said cells, said input data and stored data selectively including fuzzy numbers, a fuzzy number being defined by an upper limit, a lower limit, said upper and lower limits defining a range, and at least one crisp number pair where one number of said pair being a non-zero degree of believe; and means for performing fuzzy mathematical operations on the data stored in said cells in response to input instructions and stored instructions to produce derived numbers, said fuzzy mathematical operations including fuzzy mathematical operations in cluding fuzzy numbers that were solectively stored in said cells of said fuzzy spreadsheet for producing at least a fuzzy number that bears a relationship to at least one of said fuzzy mumbers that were stored in said cells on which fuzzy mathematical operations were performed; wherein said controller stores said fuzzy number in one of said cells of said fuzzy spreadsheet.

19/69,K/18 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0006942193 - Drawing available WPI ACC NO: 1994-341342/199442 XRPX ACC NO: N1994-267809

searching for point in regions defined by attribute ranges in e.g spread sheet - storing one or more attribute tables separately from cell data and sorting and searching attribute data
Patent Assignee: TIMELINE INC (TIME-N)
Inventor: SCHUY D E; YARNELL D F
Patent Family (1 patents, 1 countries)

Patent Application Number Kind Date Number

Kind Date Update us 5359729 US.1991707885 19910531 Α 19941025 Α 199442 в us 1993162839 19931203 Α

Priority Applications (no., kind, date): US 1991707885 A 19910531; US 1993162839 A 19931203

Patent Details

Kind Lan Number Pg Dwg Filing Notes us 5359729 Continuation of application US ΕN 1991707885

Alerting Abstract US A

The method involves defining regions, such as those determined by

attributes in a **spread sheet**, by ranges of attribute values. Regions are distinct if they differ in their number of ranges (dimension) or because a pair of corresponding ranges fail to overlap.

A region is located for a given point by; sorting the regions by lower range value and dimension to form list A, then by upper range and dimension to form list B, paring lists A and B to sublists of the dimension of the point, and searching the shorter of the pared lists.

USE/ADVANTAGE - Sorting and searching data tables and for using tables to

USE/ADVANTAGE - Sorting and searching data tables and for using tables to streamline operation of electronic spreadsheets .

Title Terms/Index Terms/Additional Words: SEARCH; POINT; REGION; DEFINE; ATTRIBUTE; RANGE; SPREAD; SHEET; STORAGE; ONE; MORE; TABLE; SEPARATE; CELL ; DATA; SORT

Class Codes

International Classification (Main): G06F-015/40 US Classification, Issued: 395600000, 395155000, 395011000, 364DIG001, 364408000, 364222900, 364223000, 364224300, 364246300, 364282100, 340146200

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2; T01-J11

searching for point in regions defined by attribute ranges in e.g. spread sheet - ...

...storing one or more attribute tables separately from cell data and sorting and searching attribute data

Alerting Abstract ... The method involves defining regions, such as those determined by attributes in a **spread sheet**, by ranges of attribute values. Regions are distinct if they differ in their number of...

...ADVANTAGE - Sorting and searching data tables and for using tables to streamline operation of electronic spreadsheets.

Title Terms.../Index Terms/Additional Words: CELL;

Original Publication Data by Authority

Original Abstracts:

Regions, such as those determined by attributes in a spread sheet, are defined by ranges of attribute values. Regions are distinct if they differ in their number of ranges (dimension) or because a pair of corresponding ranges fail to overlap. A region is located for a given point by: (1) sorting the regions by lower range...

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File
        2:INSPEC 1898-2007/Jul w5
          (c) 2007 Institution of Electrical Engineers
File
        6:NTIS 1964-2007/Aug W3
        (c) 2007 NTIS, Intl Cpyrght All Rights Res 8:Ei Compendex(R) 1884-2007/Aug W1
File
       (c) 2007 Elsevier Eng. Info. Inc.
34:SciSearch(R) Cited Ref Sci 1990-2007/Aug W2
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       35:Dissertation Abs Online 1861-2007/Jul
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File
      65:Inside Conferences 1993-2007/Aug 13
          (c) 2007 BLDSC all rts. reserv.
File
       95:TEME-Technology & Management 1989-2007/Aug w2
(c) 2007 FIZ TECHNIK
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(c) 2007 The Hw Wilson Co.
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          (c) 2007 INIST/CNRS
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          (c) 2007 Info. Sources Inc
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          Comp & dist by NTIS, Intl Copyright All Rights Res
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
          (c) 2006 The Thomson Corp
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
       (c) 2002 The Gale Group
56:Computer and Information Systems Abstracts 1966-2007/Jul
File
          (c) 2007 CSA.
File
       60:ANTE: Abstracts in New Tech & Engineer 1966-2007/Jul
          (c) 2007 CSA.
                  Description
Set
         Items
S1
       5623171
                  CELL OR CELLS
S2
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                  S1(5N)BOUND?
S3
      11484105
                  BOUND? OR LIMIT??? OR LIMITATION? ? OR RESTRICT? OR CONFIN-
               ??? OR CONFINEMENT? OR PROSCRIB? OR PRESCRIB? OR ALLOW? OR DE-
               FIN??? OR DEFINITION? OR FINITE OR CIRCUMSCRI?
S4
       1004595
                  S3(5N)(VALUE OR VALUES OR DATA OR NUMBER? ? OR NUMERIC??)
S5
         84720
                  S3(5N) VARIABLE? ?
         12828
                  S3(5N)(NUMERAL? ? OR DIGIT? ? OR INTEGER? ? OR DATUM? ?)
S6
S7
       4734847
                  RANGE? ? OR RANGING OR ENDPOINT? OR STARTPOINT?
                  (START??? OR BEGIN???? OR COMMENC??? OR COMMENCEMENT?)(30N-
S8
        128250
               )(TERMINAT??? OR END? ? OR ENDED OR ENDING? ? OR CONCLUD? OR -
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                  (MAXIMUM? OR UPPER OR BOUNDMAX? OR MAXBOUND? OR HIGHEST OR
               GREATEST) (30N) (MINIMUM? OR LOWER OR BOUNDMIN OR MINBOUND? OR -
               LOWEST OR SMALLEST OR LEAST OR BOTTOM)
S10
          9884
                  MAXMIN OR MINMAX OR MIN(1W)MAX
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S11
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S12
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                  WORKSHEET? OR WORK()SHEET? ?
S13
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S14
         10922
                  (S2 OR S13) AND S7:S10
S15
                  S14 AND S11:S12
        150014
s16
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S17
         10922
                  S16 AND S1
S18
                  S17 AND S11:S12
            11
S19
            11
                  S15 OR S18
S20
                  S19/2005:2007
s21
            10
                  S19 NOT S20
S22
                  RD (unique items)
              (Item 1 from file: 8)
e 8:Ei Compendex(R)
DIALOG(R) File
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07265372 E.I. No: EIP95102889104 Title: Dynamic what-if analysis: exploring computational dependencies with slidercells and micrographs Author: Truve, Staffan Corporate Source: Chalmers Univ of Technology Conference Title: Proceedings of the Conference on Human Factors in Computing Systems. Part 2 (of 2) Conference Location: Denver, CO, USA Conference Date: 19950507-19950511 E.I. Conference No.: 43724 Source: Human Factors in Computing Systems (CHI) - Conference Proceedings v 2 1995. ACM, New York, NY, USA. p 280-282 Publication Year: 1995 CODEN: 002163 Language: English Document Type: CA; (Conference Article) Treatment: G; (General Review) Journal Announcement: 9512W1
Abstract: The use of spreadsheets for what-if analyses can be simplified by allowing values to be set by small sliders and cell displayed as micro-graphs. The sliders define a range in which a cell value will be varied, and the graphs illustrate how other cell values vary when the slider- cell has a value in the range. The resulting mode of operation emphasizes interaction between the system and the user in searching for a desirable value of a cell, and also illustrates the stability of that value by showing the value in a context around it. (Author abstract) 6 Refs. 22/7/5 (Item 2 from file: 8) DIALOG(R)File 8:Ei Compendex(R) (c) 2007 Elsevier Eng. Info. Inc. All rts. reserv. 04829688 E.I. Monthly No: EI8512113907 E.I. Yearly No: EI85019956 Title: ADAPTING THE SPREADSHEET TO ENGINEERING PROBLEMS. Author: Palmer, M. E. III; Pecht, M. G.; Horan, J. V. Corporate Source: Univ of Maryland, Dep of Mechanical Engineering, College Park, MD, USA Source: Computers in Mechanical Engineering v 4 n 2 Sep 1985 p 49-56 Publication Year: 1985 CODEN: CMENDY ISSN: 0745-9726 Language: ENGLISH Document Type: JA; (Journal Article) (Theoretical) Treatment: A; (Applications); T; Journal Announcement: 8512 Abstract: A spreadsheet is composed of a two-dimensional matrix of entries, called cells, which can contain information of three types: text, numbers, or formulas. Programming a spreadsheet involves entering formulas into cells. A formula can be moved or copied from one cell or range to another. Spreadsheets can be used to solve fundamental problems in the area of numerical analysis including nonlinear and linear equations, interpolation, approximation, least squares fitting, initial value problems, boundary value problems and differential equations. An example of heat transfer in a printed circuit board is given. 8 refs. 22/7/8 (Item 1 from file: 35) DIALOG(R)File 35:Dissertation Abs Online (c) 2007 ProQuest Info&Learning. All rts. reserv. 01783729 ORDER NO: AADAA-19996522 Tapestry over time: A tableau approach to the visualization of multivariate dynamics Author: Hanes, John Chisman, Jr. Degree: Ph.D.

Corporate Source/Institution: The University of North Carolina at

2000

Year:

5.

Greensboro (0154)

Director: Lloyd Bond

Source: VOLUME 61/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 5947. 231 PAGES

ISBN: 0-493-04013-7

Originating from an evaluation conducted by the author for the Center for the Study of Social Issues, University of North Carolina - Greensboro (UNCG), under contract with Family and Children's Services of Greensboro, NC, the Tapestry Over Time (TOT) approach to the display of multivariate data utilizes Microsoft's Excel spreadsheet for showing data in a variety of combinations. Each workbook in Excel may contain up to 256 worksheets (spreadsheets). This allows manipulation of subjects, variables, and occasions by pivoting rows and columns as well as worksheets to display any two or all three of these elements of data on a single worksheet. By assigning colors to either discrete values or ranges of values for continuous variables, and by applying these colors to the spreadsheet cells containing the values, patterns and associations among a number of subjects, variables, and occasions reveal themselves without reliance upon Excel's many charting possibilities.

Among a number of techniques for graphic multivariate display Chernoff faces offers a uniquely engaging and fairly widely applied representation of these approaches. To compare the efficacy and efficiency of TOT to Chernoff faces with regard to United States social indicators, the author developed two short instruments that he administered to a convenience sample of 75 undergraduate and graduate students enrolled in six courses conducted by the departments of Educational Research Methodology and Geography at UNCG. Principal results show that TOT outperformed Chernoff faces in enhancing understanding of the method of processors. retention of the method of presentation, and preference ratings, but only reflected a negligible advantage on total response time.

Some other explorations with TOT demonstrate the range and utility of this method of multivariate data display. Many features of Excel enhance the versatility of the TOT approach to increase understanding with fidelity

in the presence of complex data structures.

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File 347: JAPIO Dec 1976-2007/Mar(Updated 070809)
           (c) 2007 JPO & JAPIO
File 348: EUROPEAN PATENTS 1978-2007/ 200731
(c) 2007 European Patent Office
File 349: PCT FULLTEXT 1979-2007/UB=20070809UT=20070802
(c) 2007 WIPO/Thomson
File 350:Derwent WPIX 1963-2007/UD=200751
           (c) 2007 The Thomson Corporation
Set
          Items
                   Description
S1
            145
                   AU=(HOBBS C? OR HOBBS, C?)
S2
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                   AU=(LEGENDRE S? OR LEGENDRE, S?)
S3
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54
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S6
                   S4 AND S5
S7
           9960
                   BOUND? (10N) FORMULA?
S8
              1
                   S4 AND S7
                   S6 OR S8
? t9/5
              (Item 1 from file: 348)
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.
Functions acting on arbitrary geometric paths
Auf willkurliche geometrische Pfade bezogene Funktionen
Fonctions employant les segments geometriques arbitraires
PATENT ASSIGNEE:
  MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052,
     (US), (Applicant designated States: all)
INVENTOR:
   Hobbs, Craig A. , c/o Microsoft Corporation One Microsoft Way, Redmond, WA 98052, (US)
LEGAL REPRESENTATIVE:
Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721),
Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1635269 A2 060315 (Basic)
APPLICATION (CC, No, Date):
                                   EP 2005104617 050530;
PRIORITY (CC, No, Date): US 940445 040914
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  HU; IE; IS; IT; LI; LT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; BA; HR; LV; MK; YU
INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):
IPC + Level Value Position Status Version Action Source Office:
  G06F-0017/24
                       A I F B 20060101 20060113 H EP
ABSTRACT EP 1635269 A2
     A facility for evaluating a spreadsheet cell is described. The facility
  reads a function call stored in a spreadsheet cell. The function call
  specifies an arbitrary geometric path and an operation to be performed on
  the specified path. The facility performs the specified operation on the specified path, and attributes one or more values produced thereby as the evaluated value of the spreadsheet cell.
ABSTRACT WORD COUNT: 65
  Figure number on first page: 1
LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application:
                     060315 A2 Published application without search report
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                                Update
                                            Word Count
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e- = 1

CLAIMS A (English) 200611 1610
SPEC A (English) 200611 3940
Total word count - document A 5550
Total word count - document B 0
Total word count - documents A + B 5550